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THE UNIVERSITY OF ALBERTA  
A STUDY OF THE POST-COLLEGE SUCCESS  
OF ALBERTA COLLEGES COMBINED  
PROGRAM STUDENTS

by



JOHN EATON

A THESIS  
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES  
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE  
OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

FALL, 1971





Thesis  
1-771F  
67

THE UNIVERSITY OF ALBERTA  
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read,  
and recommend to the Faculty of Graduate Studies for  
acceptance, a thesis entitled "A Study of the Post College  
Success of Alberta Colleges Combined-Program Students",  
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Date.....August 9,.....



## ABSTRACT

The purpose of this study was to examine the post-college success of Alberta colleges' combined program students as a measure of the success of the combined programs offered at the colleges. Examination of the literature indicated that little research had been completed in North America concerning combined programs and that no such formal studies had been attempted in Alberta. This study provides information that was not available previously about the success of the colleges' combined programs at 'salvaging' students for university level studies. Data were gathered from the students by means of a mailed questionnaire. High school, college and university academic results were obtained from the files of the Department of Education and from the Registrars' offices of each of the colleges and universities involved.

The extent to which the combined program students were successful in transferring to a university and their subsequent success in university were determined. Personal and academic factors and student opinions were explored in relation to the students' transfer success, and the problems encountered upon attempted transfer from a college to a university by successful and non-successful transfers were examined.

Sex, marital status, size of high school attended, year of college attendance, level of counselling received and high



school academic performances were found to have little or no bearing on a student's transfer success. Few of the successful transfers (less than 20 percent) experienced serious transfer difficulties with each of the twelve problems most commonly encountered upon transferring to a university from a college. Those students who did not transfer reported their own failure to take advantage of the combined programs as the most serious reason for their failure to transfer.

Seventy-three percent of the total combined program population managed to reach some level of university studies, but they did less well academically in university than did regular college transfers and native students.

The study indicated that the combined programs of the Alberta colleges are fairly successful at 'reclaiming' students for university level studies, but there remains a need for a closer liaison between the colleges and universities to reduce the 'transfer shock' experienced by those who do transfer.

At present combined programs appear to perform an important service to students whose university aspirations have been thwarted by their early academic performances, but additional studies are necessary to assess adequately the true value of such programs.



## ACKNOWLEDGMENTS

Grateful acknowledgment is expressed to all those who provided access to the data relevant to this study.

The writer wishes to express special appreciation to his advisor, Dr. G. McIntosh, for his time and patience in the final stages of this thesis. Appreciation is also extended to Dr. A. Konrad and Dr. W. Harris for their kind assistance on the thesis committee.

Finally, to my wife Linda, I express my gratitude for her unselfish support, aid, guidance and constant encouragement.





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## Chapter 1

### THE PROBLEM

#### Introduction

The open door policies of the Alberta colleges have led in recent years to an influx of college students with academic deficiencies.<sup>1</sup> Until 1966 little concern was shown towards assisting such students in overcoming their deficiencies once they were accepted into a college (Smith, 1966: 30). Since then, most of the colleges have adopted one or more kinds of academic upgrading programs whereby students are able to complete their matriculation requirements while in college attendance.

Three basic remedial programs are offered by the colleges under the titles of: 1. Combined Matriculation - University Program, 2. University Preparatory Program and 3. Adult Upgrading Program. Of the three, the Combined Matriculation-University Program was the major concern of this study.

There has been a recent focusing of attention on and a sudden rise of interest in combined programs and in the students associated with them. Student groups from Red Deer and Grande Prairie colleges, the Presidents of Medicine Hat and Grande

<sup>1</sup>A student is described as having an academic deficiency if he lacks one or more courses necessary for a complete senior matriculation.



Prairie colleges and the Registrars of Red Deer, Grande Prairie, Camrose Lutheran and Medicine Hat colleges expressed to this researcher that a need existed in Alberta for a follow-up study to determine some of the problems which graduates of the combined programs have encountered upon attempted transfer to an Alberta University.

At the time of this study only two informal studies were known to have been completed in Alberta to collect post-college data on the combined program students of the Alberta colleges. Both of these studies, one in 1969 by the Registrar of Grande Prairie college, and one by the Students' Union of Red Deer college, attempted only to determine the university to which each of their students had transferred. No information was collected to determine the transfer success of combined program students.

### Need for the Study

One and two year colleges have been increasingly looked to as a means of accommodating a large number of freshmen and sophomore students (Medsker, 1960: 119). As this trend has continued it has become more important that the graduates of such colleges who transfer to universities be adequately prepared to meet the challenges of a university academic life. The college, therefore, has some responsibility to ensure the adequacy of its transfer programs in preparing students for successful transfer to the university of their choice. To meet this responsibility the existing transfer programs should be subjected to continuous evaluation based on the success of college transfer students





in the university to which they transfer (Medsker, 1958: 116; Wilson, 1970: 269; O'Connor, 1965: 16).

Medsker has written that remedial programs provide a 'salvage function' for students who lack matriculation requirements for college or university entry (Medsker, 1960). Recent research has failed to substantiate this claim (Maddocks, 1971: 4), and in fact the small amount of literature that exists seems to suggest that little is being done to 'reclaim' high school students for university level studies. Roueche (1967) reported that the available literature documenting follow-up studies of remedial students was not extensive. Where the literature did exist, it was found to be descriptive in nature and provided no support for the effectiveness of remedial programs.

Wilkerson (1966: 2) discovered that there was very little evidence to support the belief that remedial programs improved the academic performances of transfer students. This lack of research findings directed at remedial programs led Roueche (1967) to reach the following conclusion: "Research is needed for the evaluation of present programs and for the foundation on which to build new remedial services."

An extensive review of the research literature from 1958 to 1971, and interviews with various administrators of six Alberta colleges produced the following conclusion: No formal attempts have been made in Alberta to determine the post-college success of college transfer students who have participated in the college remedial programs, or specifically, in the combined



programs. This lack of research, together with the findings of Dorothy Wilkerson (1966: 2), that the remedial curricula in most of the colleges which she studied in the United States were relatively unsuccessful, led to the conclusion that there was a need in Alberta for this study.

### Statement of the Problem

The major problem. The purpose of this study was to provide information concerning a specific kind of college transfer program which combined both high school matriculation credits and a university transfer function -- the combined program. The central problem in this research was to measure the post-college success<sup>2</sup> of students who participated in combined programs of study offered at the Alberta colleges and to determine the factors related to that success.

The subproblems. The following subproblems were relevant to the major problem of this study.

1. What was the ratio of transfer students to non-transfer students in the total population?
2. Was there a relationship between the personal characteristics and background variables of the students and their decision to transfer or not to transfer to a university following college?
3. Were there significant differences among groups of students based on their distributions by university academic results and their college of origin?

<sup>2</sup>Post-college success is defined on page eight under the title -- Success.



4. Were there significant relationships between the transfer problems encountered by the transfer students and their college of origin?

5. What advantages were provided the non-transfer students by their college education?

6. Were there significant relationships between the transfer problems encountered by the non-transfer students and their colleges of origin?

Subproblem 1 was studied by determining the frequencies and percentages of those students who did or did not transfer to a university, as a total group and by colleges. The second subproblem was initially studied by means of a literature review which revealed that student post-college success seemed to be related to a number of relevant factors. These factors were:

1. High school grade point average (Rice and Schofield, 1969; Hughes, 1968).

2. Size of the high schools from which the students were drawn (Rice and Schofield, 1969).

3. Marital status (Aiken, 1968).

4. Grades earned in college (Orange Coast Junior College District, 1970).

5. Student attitude to counselling services (Bossen and Burnett, 1970).

6. Sex of the student (Falkenberg, 1970: 74).

To provide information concerning the above factors, frequency and percentage tables were printed and tabulated for



the transfer and non-transfer students on the basis of the total population and for each college population.

To study Subproblem 3, the Chi Square test was utilized to determine the differences among the respective colleges according to the pass or fail frequency distributions of the college transfer students.

Subproblem 4 was studied by means of a Chi Square analysis applied to the frequency distributions of the transfer students based on the transfer problems encountered and their college of origin.

The fifth Subproblem was studied by presenting the self-reported advantages gained by the non-transfer students through their college education. The final Subproblem was studied by presenting the frequency and percentage distributions of the non-transfer students based on the transfer problems encountered and their college of origin.

### Delimitations

The study was confined to four Alberta colleges --one private college, Camrose Lutheran College, and three public colleges, Grande Prairie College, Medicine Hat College and Red Deer College. Mount Royal College was to have been included in the study but the researcher was unable to gain access to the necessary data. Camrose Lutheran College was selected as an alternate source of data to Mount Royal as it provided a population of combined program students sufficient for this study.





The population included all of those combined program students who had attended one of the four colleges in one or more of the academic years 1966-1967, 1967-1968, and 1968-1969. The rationale behind this selection of dates was based on the fact that few if any of the colleges offered a combined program prior to 1966-1967. The academic year, 1968-1969, was selected as the latest year for study since it was necessary to allow the students enough post-college time to complete at least one full year of studies at a recognized university or to work at least one full year if the student did not transfer to a university.

#### Limitations

The results of this study, based on the data derived from Alberta college students and their academic profiles, would not, in my opinion, be readily applicable to colleges other than those of this study because the population of students is too small to permit generalizations to other colleges.

#### Clarification of Terms

Public college. The term, public college, refers to those institutions named 'college' or 'public college' in the Alberta Colleges Act (1969).

Private college. A private college is a school under the control and ownership of a denominational corporation but operating within the framework of provincial patterns and university regulations. It is not established pursuant to



the Public Colleges Act of Alberta (Loken, 1965:4).

Transfer program. The term 'transfer program' refers to any program of studies designed to permit a student to continue his studies at a university subsequent to successful graduation from the college (Loken, 1965: 4).

Transfer success. In this study a student is considered to have achieved transfer success if he is able to enter the sophomore year of university following college without loss of college credits.

Success. Two measures of success were used, one for those transfer students who completed a transfer to a university and one for those who failed to do so.

(a) Success for those students who transferred to a university was defined as the grade point average achieved at a recognized university.

(b) Success for those students who did not transfer was defined in terms of the student's own perception of the advantage gained by taking a combined program.

Transfer student. A student who transfers earned credits for courses taken at a college to another school of higher learning is termed a transfer student (Loken, 1965:4).

Combined high school matriculation-university transfer program. For the purpose of this study, the term 'combined high school matriculation-university transfer program' refers to any college level program which has a university transfer



function and permits the student to complete his matriculation deficiencies while in college attendance. The length of the term has necessitated the use throughout this thesis of the abbreviated version -- combined program. All four colleges consider one or more of the following as prerequisites for acceptance into their combined program: 1. the student must have 50% or higher in four matriculation subjects with an average of at least 60% in four subjects or 2. the student must have 50% or higher standing in five matriculation subjects with an average of less than 60% or 3. the student must be 18 or more years of age.

#### Organization of the Thesis

The structure of the thesis has been assembled in seven chapters following the introduction.

A review of the related literature is presented in Chapter 2.

The methods employed in data gathering and analysis and the instrument used for this study are described in Chapter 3.

The relationship between the group of students who returned questionnaires and the group of students who did not is determined in Chapter 4.

The data concerning the success of students following a combined program are reported in Chapter 5.

The data concerning the transfer group's success in a recognized university are presented in Chapter 6.



The data concerning the non-transfer group's reported success are reported in Chapter 7.

The conclusions arising from the study and suggestions for further research are stated in Chapter 8.





## Chapter 2

### RELATED LITERATURE

#### Introduction

The proliferation of junior or community colleges has drawn attention to a new type of student aspiring towards a university degree. This student, the combined program student, was one who had entered a college, but who was required during his college program to complete additional courses or programs to overcome deficiencies in his academic background.

Before exploring the degree of success achieved by such combined program students from the Alberta colleges, a brief survey of the combined programs in Canada and the United States, the philosophy behind such programs, and a review of the closely related research literature on regular transfer studies will be presented.

#### Philosophy of Combined Programs

The United States. Current admissions policies and procedures in public junior colleges in the United States have made higher education possible for many students who were previously unable to meet the admissions criteria usually prerequisite for college admission (Bossone, 1969). By 1967, nearly



nine hundred colleges had opened their doors to students, requiring only that such students be residents of the community or have some high school education (Gleason, 1967: 65).

With the advent of open door policies, students deficient in high school courses or in abilities necessary for college success, required special help in order to succeed in college. It became vital to provide such students with a program of remediation (Bossone, 1969), for it was felt that the open door policy was justified only if the college provided valuable educational experiences for all students admitted (Roueche and Harleburt, 1968).

Differences of opinion have been expressed as to the so-called 'salvage function' provided by remedial programs in the junior colleges. Medsker has said that college remedial programs should assist as many students as possible to attain realistic goals that were closed to them on high school graduation (1960: 65). J. F. Kauffman (150-151) has pointed out that colleges lose approximately half of their students due to attrition in the four years following high school. This may be because the "junior colleges perform a more effective job of educating their good students than in preparing students with serious deficiencies for transfer to four year institutions" (Knoell, 1965)." Birnbaum (1970) has echoed this same opinion and has stated that the

salvage function of the community college may be a statistical artifact . . . . The community college transfer



program acts as a filter through which potentially successful students with relatively poor high school grades can pass, rather than as a program which strengthens marginal students through counselling and remediation.

Whatever the arguments may be against the open door policies of the American junior colleges, combined and remedial programs continue to be widespread. The future will probably see an increase in such programs since the present philosophy of the colleges is that:

junior college students who were ineligible to enter a four year institution at the freshman level because of poor high school records should not be denied admission as a transfer student on these grounds (American Council, 1967: 7).

Canada. Falkenberg (1970: 3) has stated that the college systems of Canada should have as one of their major concerns

a sound transfer system along with a salvage function of allowing students who dropped out because of lack of motivation to return to school to become successful students.

Three comprehensive college systems exist in Canada which are similar to the junior colleges of the United States and which meet Falkenberg's major concerns: 1. the Quebec system, 2. the British Columbia system and 3. the Alberta system.

The College d'Enseignement Général et Professionnel, known as the CEGEP college system of Quebec, ensures all students who wish to enter university a means of developing a sound educational base. Students who desire to achieve a university education must complete two years of college



studies in one of the Quebec colleges following graduation from the eleventh grade of the public schools (Beauregard, 1971). To date, this system has worked effectively as students have entered the colleges fairly easily from the eleventh grade of the public schools (Beauchemin, 1967: 5).

Since students from the eleventh grade of the high schools enter directly into the CEGEPs a combined program as defined in this study does not exist in the Quebec college system.

In British Columbia, each college formulates its own acceptance policies for high school students. Generally, four basic policies have been subscribed to (British Columbia College Calendars, 1970):

1. Any student not deficient in more than two courses required for minimum secondary graduation may be accepted.
2. Any student nineteen years of age or greater may be accepted under special circumstances which are discussed on an interview basis.
3. Any student who is successful on college entrance exams is accepted but he must be a mature student.
4. Any student whose past experience gives him proficiency in his selected subject area may be selected.

Although the entrance requirements of the British Columbia colleges are basically similar, some of the college programs differ. Capilano, Douglas and Okanagan Colleges





require the student to complete his high school matriculation deficiencies on his own time. Only Vancouver City College, Selkirk College and New Caledonia College offer combined programs allowing the student to make up his high school deficiencies before commencement of college level courses.

In Alberta the universities require college transfer students to have acquired the knowledge and skills to cope satisfactorily with the courses they undertake in university. In response to this requirement the colleges of Alberta have begun to offer courses which may be described as combined programs or as preparatory programs. Entrance into these programs requires that the student be eighteen or more years of age, or deficient in not more than one matriculation subject and with an average of sixty percent or more on the subjects passed (Medicine Hat College Calendar, 1971).

College remedial programs and combined programs of study have become widespread in Canada and the United States. The overall philosophy has been that such programs 'salvage' students who might normally 'drop out' of school because of the inaccessibility of universities. No consensus has ever been reached to determine the success of such programs at meeting this 'salvage' function. This problem has probably resulted from the lack of research literature available to document the success of students in remedial programs. The follow-up literature reviewed tends to support this



conjecture.

### Follow-up Literature

A survey by Roueche (1967: 1) of twenty-four follow-up studies of junior college transfer student success in California universities demonstrated that:

1. students typically experienced a lower grade point average during their first semester following transfer,
2. in most cases recovery of marks during subsequent semesters can be noted and,
3. grade point averages improve with each successive semester at the senior institution.

In addition, Roueche (1967: 1) concluded from a survey of the literature "that transfer students' marks were lower than the average grades made by students who entered the senior institutions as freshmen, that the transfer student is less likely than the native student to graduate, and that the transfer student who does graduate takes longer to reach the baccalaureate than does the comparable native student."

Two separate follow-up studies of transfer student success, one by Walker (1969) and the second by Dennison and Jones (1961), arrived at conclusions similar to those stated by Roueche. Walker discovered that native students made better grades in the upper division of university, had a lower attrition rate, and progressed more rapidly towards graduation than did transfer students. The Dennison and



Jones study disclosed a higher ratio of failure grades for transfer students at the University of British Columbia, than for native students.

Further documentation which adds support to the evidence that college students do less well in university than native students, is provided by Hills (1965). He concluded that transfer students suffer transfer shock upon entrance to the university, have more difficulty with obtaining good grades than native students and take longer to graduate.

Medsker (1958: 117) stated that although junior college transfers tended to dip in their performance in the first term after transfer, thereafter they steadily increased their grade point averages. In some institutions they compared favorably with native students, and at the University of California, one group excelled the native students by the end of the senior year.

A more recent California study by Gold (1969: 8) disclosed that transfer students can do well in university:

200 former L.A.C.C. [Los Angeles City College] students entered the University of California in the academic year 1967-68 and made an outstanding record: 30% earned a B average or above, with only 11% earning below a C average.

Birnbaum (1965), at the University of New York, also discovered that the junior college transfer students could be just as successful as native students in university.



Two recent reviews of the transfer literature have suggested that it was impossible to generalize the findings of one transfer study to colleges other than those involved in the research. Falkenberg (1970: 26) reviewed the literature from 1930 to 1969 and concluded that there was inconsistency in the findings. Maddocks (1971: 7) in his review of the literature from 1965 to 1970 stated the opinion that a complete picture of the history of the junior college student cannot be drawn from the present literature. Many questions he found were left unanswered.

In Alberta, only one formal investigation of college transfers' post-college success has been attempted. This study by Falkenberg (1970) compared the university grade point averages of transfer students from the Alberta public junior colleges with the university grade point averages of university native students. The college sample consisted of those college students who were in attendance at a college during the academic year 1965-1966 and the university sample was selected randomly from those native students in attendance at the University of Calgary or the University of Alberta during the academic years 1966-67 and 67-68. No attempt was made to distinguish combined program students from regular college transfer students.

The results of the study revealed that Alberta junior college students who transferred to the Alberta





universities named above did not quite equal university native students in academic achievement.

The inconsistency of the research literature findings has made it apparent that the results of Falkenberg's study were too general to be applied to specific college programs such as the combined programs. Coupled with the lack of research to determine the degree of success of combined program graduates, the inconsistency of available findings suggested a real need to address the research problem selected for this thesis. In Medsker's words (1960: 119), for students with academic deficiencies in the colleges, "their shortcomings in the next institution and the apparent reasons for their poor performances must be investigated".



## Chapter 3

### METHODOLOGY AND RESEARCH DESIGN

#### Sources of Data

Data collection was carried out in four steps beginning in February of 1971. The initial procedure involved the identification of the population from each of the colleges. The Academic Dean of Camrose Lutheran College and the Registrar of Red Deer College provided a list of names, addresses and the academic performance of all combined program students who had attended their respective colleges during the academic years 1966-67, 1967-68, and 1968-69. The same data were made available by the colleges of Grande Prairie and Medicine Hat. The Presidents of these latter two colleges granted access to the student files. The population was then identified from the students' records and the required data were copied directly from the transcripts on file.

A questionnaire packet was subsequently mailed to each member of the population. The questionnaire packet consisted of: 1. a letter of introduction, 2. a questionnaire and 3. a stamped self-addressed envelope. Three weeks following the mailing of the initial questionnaire a second questionnaire was mailed to those



students who had failed to respond to the first. This questionnaire was in turn followed up by a third at the end of a two week period for those students who had still failed to respond.

Data for the populations' high school performance were obtained from the Alberta Department of Education. The students' names were arranged alphabetically for ease of handling. The list was then used to identify the students' high school transcripts from the Departments' files. Information on high school performance was then transcribed directly from the records provided by the Department of Education. For those students in the population who attended a high school outside of the province, their high school records were obtained from copies of their high school transcripts kept on file by the colleges.

Permission for access to the data on student post-college university academic performance was granted by the President of each Alberta university. Data on the university transfer students who were identified by the returned questionnaires and in some instances through a search of the university files, were copied directly from the students' university transcripts. In some cases where it was impractical to contact universities or schools of higher learning outside of Alberta to which



some students had transferred after college, the students themselves were asked to report their grade point averages for each year of attendance in these institutions.

### Questionnaire Development

The questionnaire was constructed to provide three types of data. The first group of questions asked for relevant personal and background information on the population. The second group of questions asked the students to record personal views regarding the college combined programs, and the final group of questions called upon the students to rate the importance of the transfer problems encountered in their attempted transfer to a university.

The majority of the questions were arranged so that a check mark was all that was required in the way of a response. Questions 10, 14 and 15 were used to test the validity of the students' responses since these data were readily available from other sources. Question 10 asked the students to name the faculty to which they transferred and question 15 asked the students to name the university to which they had transferred. Question 14 asked the students to list their high school equivalent marks.

Responses to question nine which posed the





question, 'Why did you choose to attend college and take a combined program rather than one of the alternatives listed above?', were arranged into the following five categories; 1. Time, 2. Practical, 3. Atmosphere, 4. Influence and 5. Job Route. The category Time included all responses which indicated that the student elected to enter a combined program to commence university level studies as soon as possible. Practical reasons, such as closeness to home and lower tuition fees were placed under the title, Practical. The category, Atmosphere, was used to refer to all of the responses to question nine which indicated that the student entered the college program because of the atmosphere the college offered. Responses which stated that the students elected the combined program because of influence from friends or relatives were placed in the category, Influence. The term, Job Route, was used to refer to all student responses which stated that they entered a combined program as a means to a work field not possible with a high school education. The five categories provided the code for transfer of the students' responses to I.B.M.cards.

Answers to question 13 which asked 'What advantages were provided to you by your college education?' were retained in their original form for direct analysis in Chapter 7.



### Final Returns

The distribution of the final questionnaire returns is reported in Table 1 below. Of the 89 students who returned completed questionnaires, 65 or 73 percent of the returns were from students who formed the transfer group and 24 or 27 percent were from students who formed the non-transfer group.

Table 1

Frequency and Percentage Distribution of the Population  
by Colleges and by Questionnaire Returns  
(not more than two significant figures  
should be read in the percentages)

College	<u>Returns</u>		<u>Non-returns</u>		<u>Totals</u>	
	f.	%	f.	%	f.	%
Grande Prairie	20	16.1	9	7.3	29	23.4
Medicine Hat	33	26.6	12	9.6	45	36.2
Camrose Lutheran	21	16.9	9	7.2	30	24.1
Red Deer	15	12.1	5	4.2	20	16.3
Totals	89	71.7	35	28.3	124	100.0

### Analysis of the Data

All of the data, including the questionnaire responses (except for question 13) and student academic results were key-punched into data processing cards. These data were then compiled by computer into frequency and percentage tables based on selected pairs of variables.



Two tests, the Chi Square ( $\chi^2$ ) test (Runyan and Haber, 1967: 206-210) and the Kolmogorov Smirnov test (Siegel, 1956: 127-36) were utilized to determine how closely the sample of 89 questionnaire respondents represented the total population. The Kolmogorov Smirnov test was used to determine the difference between the two groups based on their distributions by sex. The Chi Square test was used to determine the differences between the two groups based on their distributions by high school and college performances.

Among college differences were tested in Chapters 5 and 6 by means of the Chi Square test.

Data presented as percentages throughout the thesis have been expressed to one decimal place. It is important to note that because of the small frequencies from which the percentages were calculated, not more than two significant figures can be employed in the analysis of the data.



## Chapter 4

### ANALYSIS OF THE QUESTIONNAIRE RETURN GROUP AND THE NON- RETURN GROUP

#### Introduction

Data which provided information on the total population are examined in this chapter to determine the relationship between the group of students who returned questionnaires (the return group) and that group of students who did not (the non-return group). To explore this problem seven hypotheses are tested for those factors which alone provided data on the complete population.

#### Hypotheses

Ho<sub>1</sub>: No significant difference exists between the return group and the non-return group based on their distributions by sex.

Ho<sub>2</sub>: No significant difference exists between the return group and the non-return group based on their distributions by high school English marks.

Ho<sub>3</sub>: No significant difference exists between the return group and the non-return group based on their distributions by high school Mathematics-Science averages.

Ho<sub>4</sub>: No significant difference exists between the return





group and the non-return group based on their distributions by high school matriculation averages.

Ho<sub>5</sub>: No significant difference exists between the return group and the non-return group based on their distributions by the number of high school courses failed once.

Ho<sub>6</sub>: No significant difference exists between the return group and the non-return group based on their distribution by high school matriculation equivalent averages.

Ho<sub>7</sub>: No significant difference exists between the return group and the non-return group based on their distributions by college grade point averages (G.P.A.).

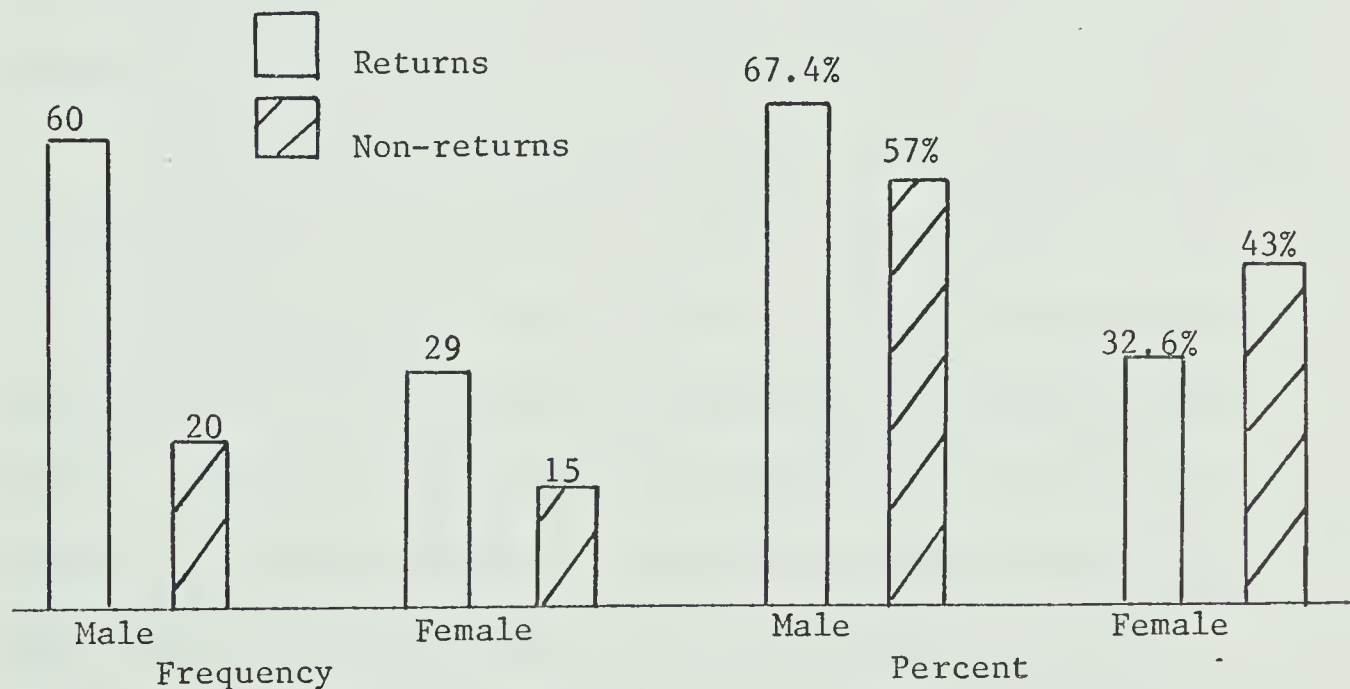


Figure 1

Frequency and Percentage Distribution of  
 The Return Group and The Non-  
 Return Group by Sex



## Data Analysis

Sex. Figure 1 demonstrates that sixty students (67.4 percent) of the return group were males and twenty-nine (32.6 percent) were females for a total of eighty-nine. The non-return group consisted of twenty (57 percent) males and fifteen (43 percent) females.

Hypothesis one ( $H_{o1}$ ) was tested by means of the Chi Square  $\chi^2$  test of significance. This test revealed an observed Chi Square value of 1.23 (see Appendix C). The theoretical  $\chi^2$  for one degree of freedom for a two-tailed test at the .05 level of significance requires a  $\chi^2$  value of 2.71 or greater in order for a significant difference to exist between the two groups tested. Since the actual value for Chi Square, 1.23, is less than that required for significance at the .05 level, 3.84,  $H_{o1}$  was accepted.

No significant difference exists between the return group and the non-return group based on their distributions by sex.

English mark. Figure 2 shows the cumulative percentage distributions of both groups of students by high school English marks. The Kolmogorov Smirnov two sample D test was applied to the figure two frequencies as a test for hypothesis two ( $H_{o2}$ ). A Dmax value (see Table 2, page 35 of this thesis) of .20 resulted. The theoretical value for Dmax at the .05 level of significance was found to be .27.  $H_{o2}$  was accepted because the observed value was less than the critical value of .27.

No significant difference exists between the return group and the non-return group based on their distributions by high school English marks.



High school Mathematics-Science average. The Kolmogorov Smirnov Dmax statistic was applied to the cumulative percentage distribution (Figure 3) of high school Mathematics-Science averages as a test for hypothesis three ( $H_{o3}$ ). The observed Dmax value was .14 (see Table 2, page 35). The critical value of D ( $D_{crit}$ ) was calculated to be .27. Hypothesis three ( $H_{o3}$ ) was subsequently accepted.

No significant difference exists between the return group and the non-return group based on their distributions by high school Mathematics-Science averages.

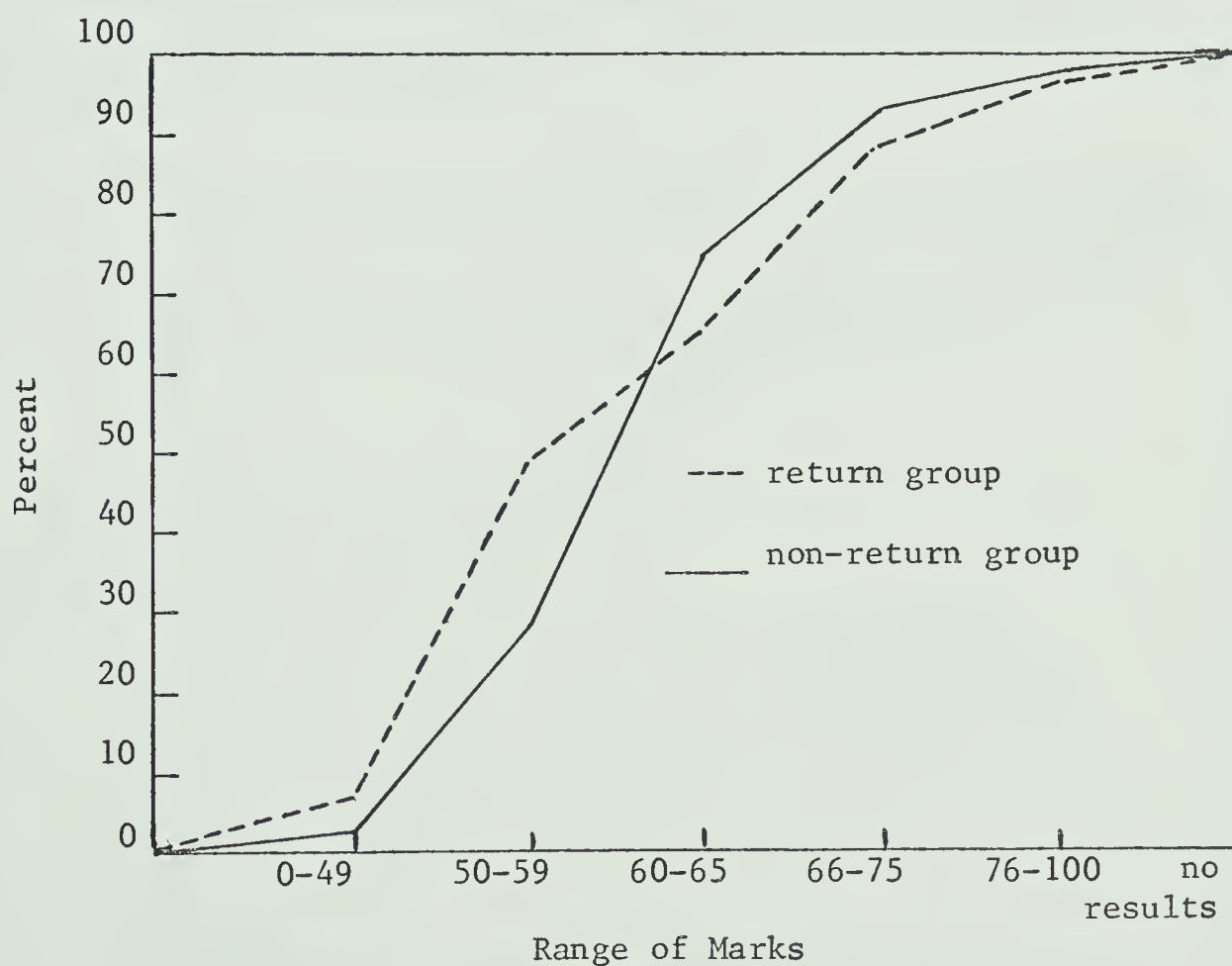


Figure 2

Cumulative Percentage Distribution of High School English Marks for the Return Group and the Non-return Group



High school matriculation averages. The Dmax test was applied in turn to the cumulative percentage distributions of the matriculation averages (Figure 4) of the questionnaire return group and the non-return group as a test for hypothesis four ( $H_{04}$ ). The derived Dmax value of .06 (see Table 2, page 35) was less than the Dcrit value of .27, obtained at the .05 level of significance. A Dmax value of .27 or greater must result in order for a significant difference to exist between the two groups tested. Hypothesis four was thus upheld.

No significant difference exists between the return group and the non-return group based on their distributions by high school matriculation averages.

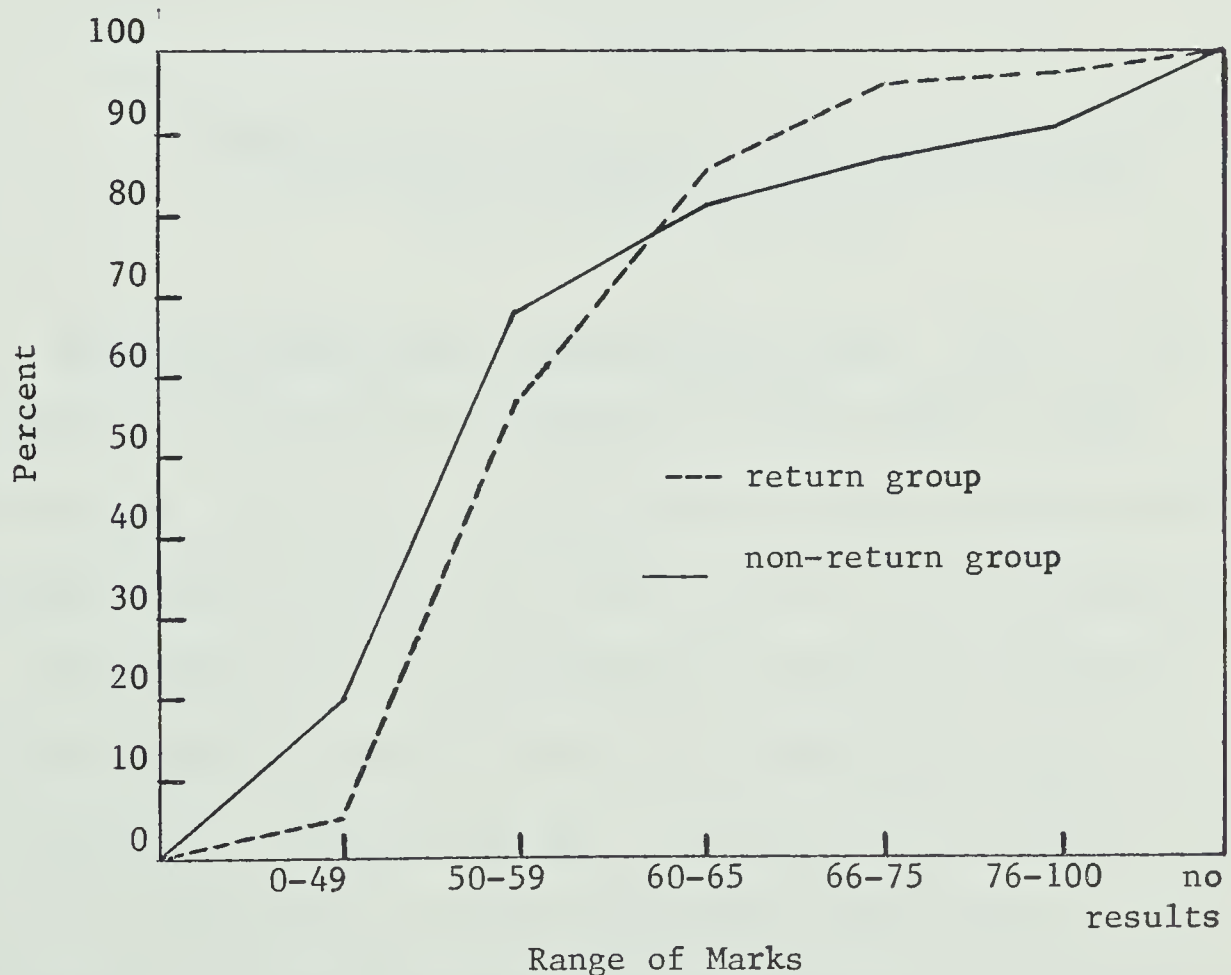


Figure 3

Cumulative Percentage Distribution of High School Math-Science Marks for the Return Group and the Non-return Group





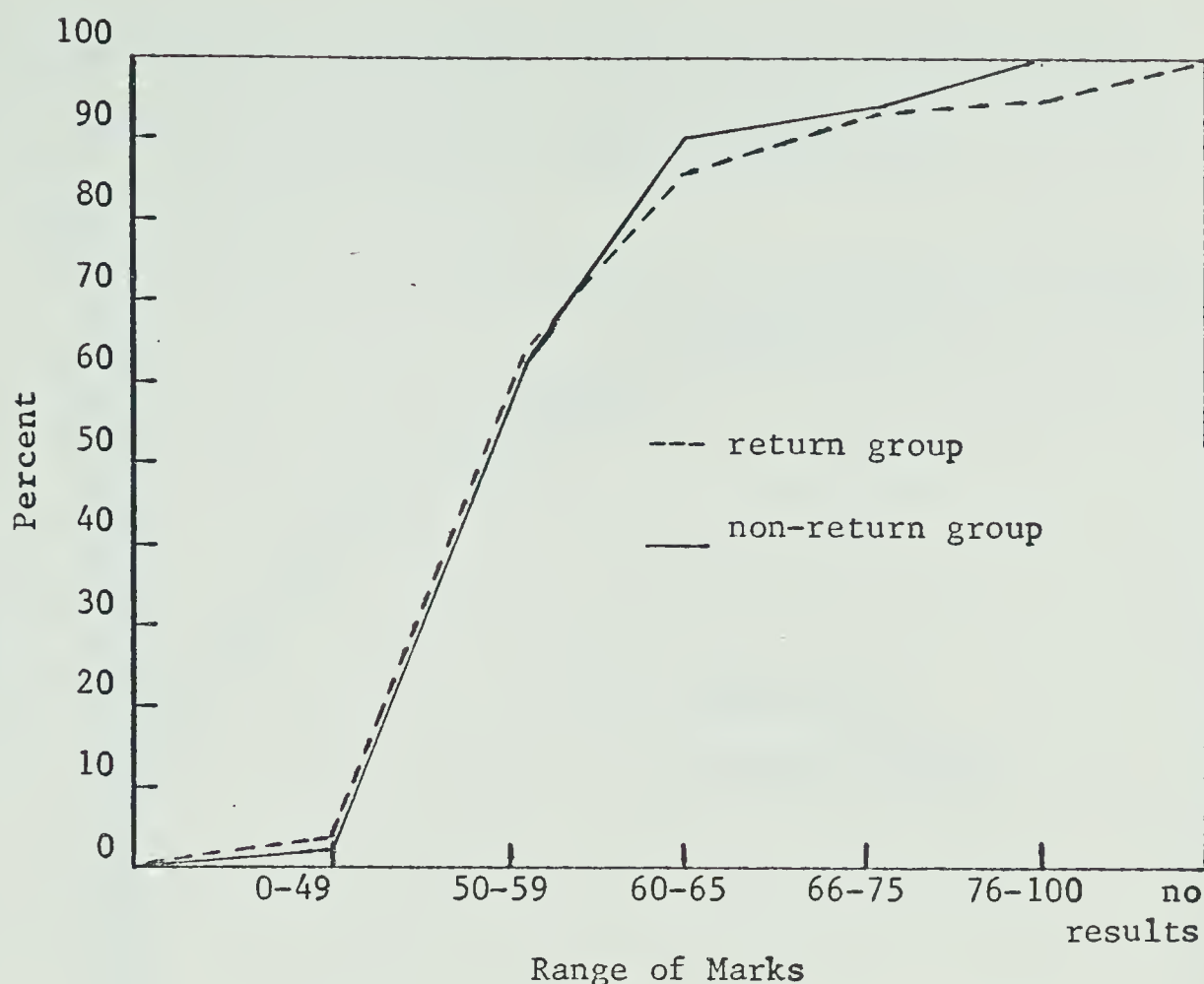


Figure 4

Cumulative Percentage Distribution of High School  
Matriculation Averages for the Return Group  
and the Non-return Group

Number of high school courses failed once. Figure 5 shows the cumulative percentage distributions for the number of high school courses failed once by the students of both the questionnaire return group and the group that failed to return the questionnaires.

The Dmax value for the difference between the frequency distributions of the questionnaire return group and of the non-return group was calculated as .11. At the .05 level of significance a Dmax value of .27 or greater must result for a real difference to exist between the tested groups. The  $H_{05}$  hypothesis was confirmed.

No significant difference exists between the return group



and the non-return group based on their frequency distributions for the number of matriculation courses failed once.

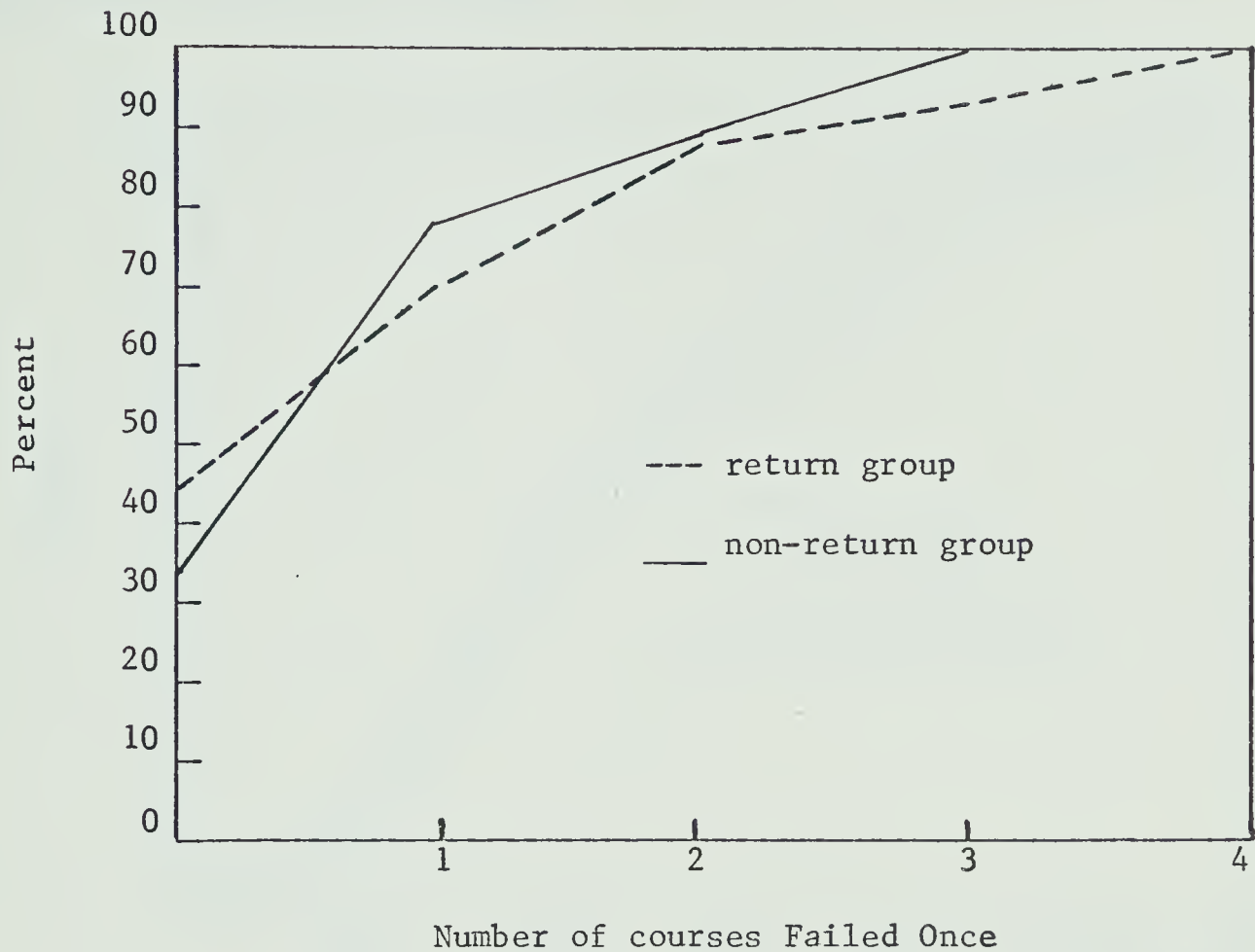


Figure 5

Cumulative Percentage Distributions of Students Based on the Number of High School Courses Failed Once, for the Return Group and the Non-return Group

High school equivalent average.<sup>3</sup> In computing the Kolmogorov Smirnov two sample statistic from Figure 6, a  $D_{max}$  value of 0.09 was obtained. This figure was well below the  $D_{crit}$  value of .27 measured at the .05 level of significance (see Table 2, page 35 ). The  $H_{06}$  hypothesis was upheld.

<sup>3</sup>The average marks achieved on matriculation or equivalent courses taken at the college are referred to here as a high school equivalent average.



No significant difference exists between the return group and the non-return group based on their frequency distributions by high school equivalent averages.

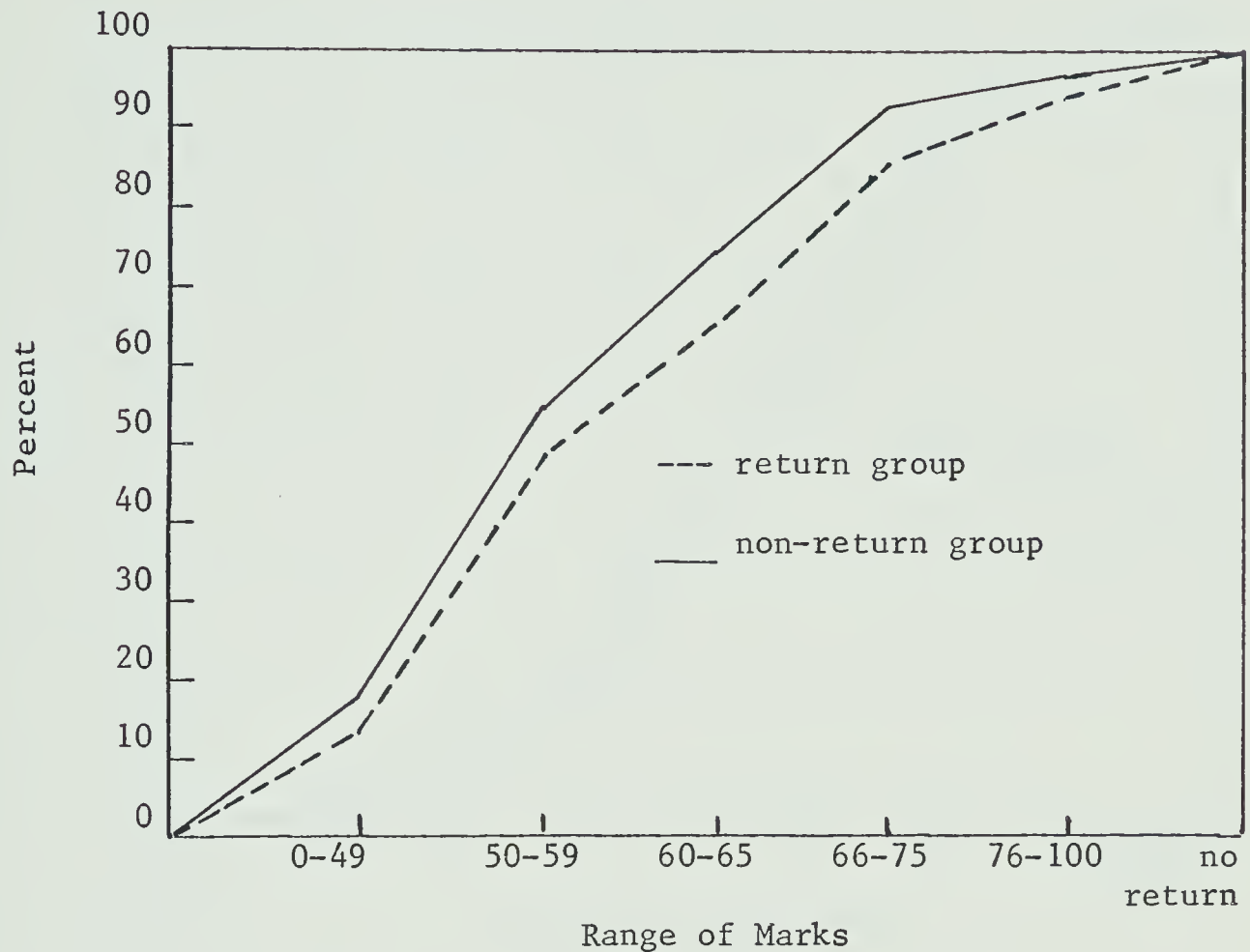


Figure 6

Cumulative Percentage Distribution of Student High School Equivalent Averages for the Return Group and the Non-return Group

College grade point averages. Figure 7 demonstrates the cumulative frequency distributions of the students' college grade point averages for the return group and the non-return group. The application of the Kolmogorov Smirnov two sample Dmax test to the Figure 7 distributions resulted in a Dmax value of .06 (see Table 2, page 35 ). The critical value of D, .27 exceeded the observed Dmax value with the subsequent acceptance of  $H_0$ .



No significant difference exists between the return group and the non-return group based on their frequency distributions of college grade point averages.

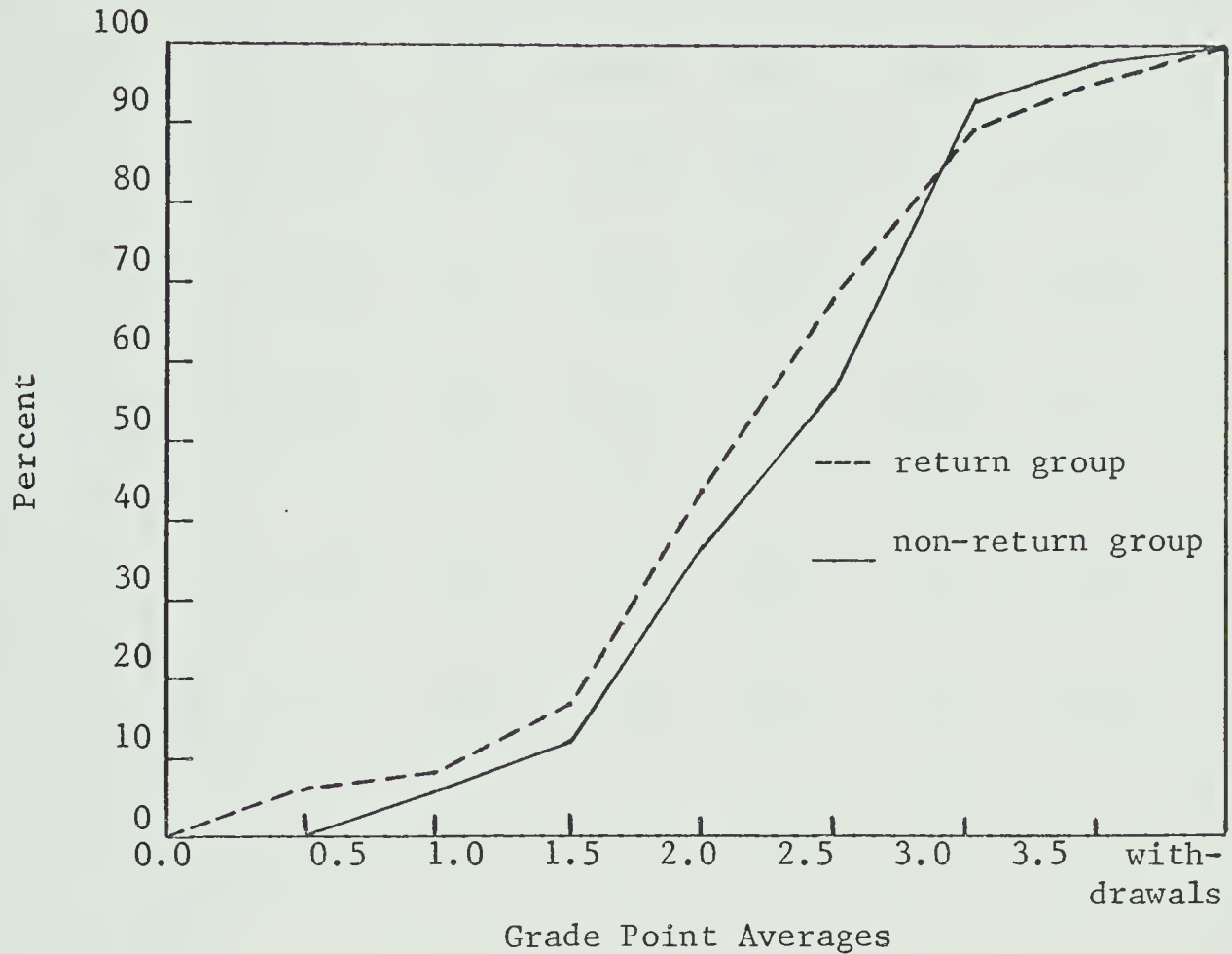


Figure 7

Cumulative Percentage Distributions of College Grade Point Averages for the Return Group and the Non-return Group

### Summary

The Chi Square ( $\chi^2$ ) test was applied to the frequency distributions based on sex for the two groups concerned in this chapter. No significant difference was found to exist between the questionnaire return group and the non-return group according to their distributions by sex.

A test of the differences between the frequency distri-





Table 2

Response Differences Between the Group of Students Who Returned Questionnaires (A)  
and the Group that did not Return Questionnaires (B) based on  
High School and College Academic Performance  
(not more than two significant figures should be read in the percentages)

Academic Factor	Group	Percentage Frequency of Academic Results Based on a Nine Point Scale									N	Dmax	Dcrit
		1	2	3	4	5	6	7	8	9			
English mark	A	6.7	41.6	18.0	22.4	6.7	3.4	0.0	0.0	1.1	89	.20*	.27
	B	2.8	25.7	45.7	20.0	2.9	2.9	0.0	0.0	0.0	35		
Mathematics- Science average	A	5.6	51.7	29.2	10.1	1.1	1.1	0.0	0.0	1.1	89	.12*	.27
	B	20.0	48.6	14.3	5.7	2.9	8.6	0.0	0.0	0.0	35		
High School matriculation average	A	3.4	62.9	22.4	7.9	1.1	1.1	0.0	0.0	1.1	89	.06*	.27
	B	2.9	62.7	28.6	2.9	2.9	0.0	0.0	0.0	0.0	35		
No. of high school courses failed once	A	44.9	25.8	20.2	4.5	4.5	0.0	0.0	0.0	0.0	89	.11*	.27
	B	34.3	42.9	14.3	8.6	0.0	0.0	0.0	0.0	0.0	35		
High school equivalent average	A	13.5	33.7	18.0	21.3	6.7	5.6	0.0	0.0	1.1	89	.10*	.27
	B	17.1	37.1	20.0	17.1	5.7	2.9	0.0	0.0	0.0	35		
College grade point average	A	6.7	1.1	10.1	27.0	24.7	20.2	6.7	2.2	1.1	89	.15*	.27
	B	0.0	5.7	5.7	25.7	17.1	37.1	5.7	2.9	0.0	35		

\*Less than Dcrit value of .27 measured at the .05 level of significance.



butions of the groups based on academic performances was accomplished by means of the Kolmogorov Smirnov two sample test. The results of this test show that there is no difference between the two groups tested based on their frequency distributions by high school English marks, high school Mathematics-Science averages, overall matriculation averages, number of matriculation courses failed once, high school matriculation equivalent averages and college grade point averages. As previously mentioned, these factors were selected for study because they alone provided data for the total population.

The above tests yielded sufficient evidence to conclude that no significant differences exist between the group of students who returned the questionnaires and the group of students who did not. The questionnaire return group was believed to be sufficiently representative of the two groups to be studied as a total population in the remaining chapters.



## Chapter 5

### CHARACTERISTICS AND BACKGROUND OF THE POPULATION

This chapter describes the characteristics of the population consisting of the questionnaire return group of 89 students. The population is subdivided into two groups: those who transferred to a university following college, and those who did not transfer to a university following college. The two groups are described with respect to their transfer success and with respect to their personal backgrounds. The Chi Square ( $\chi^2$ ) test has been applied to each factor to determine the relationship between these factors and student transfer success.

Among college differences appeared to exist on four of the factors; transfer success, sex, student ratings of college counselling and alternative schooling options. Chi Square analysis was employed to determine whether or not such among college differences did exist.

#### Transfer Success, Personal Characteristics and Background Variables

Transfer success, sex, marital status, number of years between high school and college, size of high school attended and year of college attendance are described in this section.



Transfer success. Data from the students and the universities indicated that 73 percent of the combined program students from the four Alberta colleges transferred to a university. The remaining 27 percent did not transfer during the time period which sets the bounds for this study.

For each college the percentages of actual transfers are reported in Table 3. Eighty percent of the Grande Prairie College (G.P.) students transferred to a university compared to 70 percent of the students from Medicine Hat College (M.H.), 81 percent of the students from Camrose Lutheran College (C.L.) and 60 percent of the students from Red Deer College (R.D.).

On calculation of a Chi Square value to determine whether or not significant differences in the distribution of the students by transfer success existed among the colleges, a value of 3.406 was determined. This value proved to be non-significant at the .05 level of significance. No differences exist among the colleges based on student distributions by transfer success.

Sex. Data from the questionnaire indicated that 67.5 percent of the population were males and 32.5 percent were females. The transfer group males accounted for 47.2 percent of the total population while the non-transfer group males constituted 20.3 percent. More than twice as many males transferred as did not.

The females who transferred to a university after college made up about 26 percent of the overall population and females





Table 3

Frequency and Percentage Distribution of Transfer and Non-transfer  
Students by Sex for Each College and the Total Population  
(not more than two significant figures  
should be read in the percentages)

College	Sex	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	Male	9	45.0	1	5.0	10	11.2
	Female	7	35.0	3	15.0	10	11.2
	Total	16	80.0	4	20.0	20	22.4
M.H.	Male	18	54.5	8	24.2	26	29.2
	Female	5	15.2	2	6.1	7	7.9
	Total	23	69.7	10	30.3	33	37.1
C.L.	Male	10	47.7	4	19.0	14	15.7
	Female	7	33.3	0	0.0	7	7.9
	Total	17	81.0	4	19.0	21	23.6
R.D.	Male	5	33.3	5	33.3	10	11.2
	Female	4	26.7	1	6.7	5	5.6
	Total	9	60.0	6	40.0	15	16.8
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Totals	Male	42	47.2	18	20.3	60	67.5
	Female	23	25.8	6	6.7	29	32.5
	Total	65	73.0	24	27.0	89	100.0



who did not transfer constituted almost 7 percent. Nearly four times as many females completed a transfer to university as those who did not.

On testing 'among college' differences by means of the Chi Square test, Chi Square values of 3.81 for males and 3.56 for females were calculated. Based on four degrees of freedom at the .05 level of significance the expected Chi Square value of 7.82 exceeds the observed values. The colleges showed no significant differences in their male and female student distributions.

The application of the Chi Square test for sex to the distribution of the total population according to transfer success produced an observed  $(\chi)^2$  value of 0.86. The expected Chi Square value for one degree of freedom at the .05 level of significance was 3.84.

No significant difference exists in the distribution of males and females by transfer success. Sex bears no relationship to transfer success.

Marital status. Of the 89 combined program students in this study, 67 percent reported themselves as single, 32 percent as married and one percent as divorced. Of the 65 students who were in the transfer group 44, or 50 percent, of the total population were single, 20 or about 23 percent of the total population were married and one, or one percent of the total population were divorced. Within the group of students who did



Table 4

Frequency and Percentage Distribution of Transfer and Non-transfer  
Students by Marital Status for Each College and the Total

Population  
(not more than two significant figures  
should be read in the percentages)

College	Marital status	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	Single	13	65.0	4	20.0	17	19.1
	Married	2	10.0	0	0.0	2	2.3
	Divorced	1	5.0	0	0.0	1	1.1
	<u>Total</u>	<u>16</u>	<u>80.0</u>	<u>4</u>	<u>20.0</u>	<u>20</u>	<u>22.5</u>
M.H.	Single	16	48.5	6	18.2	22	24.8
	Married	7	21.2	4	12.1	11	12.3
	Divorced	0	0.0	0	0.0	0	0.0
	<u>Total</u>	<u>23</u>	<u>69.7</u>	<u>10</u>	<u>30.3</u>	<u>33</u>	<u>37.1</u>
C.L.	Single	9	42.9	3	14.3	12	13.5
	Married	8	38.1	1	4.8	9	10.1
	Divorced	0	0.0	0	0.0	0	0.0
	<u>Total</u>	<u>17</u>	<u>81.0</u>	<u>4</u>	<u>19.0</u>	<u>21</u>	<u>23.6</u>
R.D.	Single	6	40.0	3	20.0	9	10.1
	Married	3	20.0	3	20.0	6	6.7
	Divorced	0	0.0	0	0.0	0	0.0
	<u>Total</u>	<u>9</u>	<u>60.0</u>	<u>6</u>	<u>40.0</u>	<u>15</u>	<u>16.8</u>
<hr/>							
Totals	Single	44	49.4	16	18.0	60	67.4
	Married*	20	22.5	8	9.0	28	31.5
	Divorced*	1	1.1	0	0.0	1	1.1
	<u>Total</u>	<u>65</u>	<u>73.0</u>	<u>24</u>	<u>27.0</u>	<u>89</u>	<u>100.0</u>

\*Combined for Chi Square Analysis



not transfer to a university following college, 16 or 18 percent of the combined program student population were single, eight students or nine percent of the total were married and none were divorced.

From Table 4 a comparison of the two groups, the transfer students and the non-transfer students, revealed that approximately one third of each group were reported as married, and two thirds as single.

The Chi Square test was applied to the distribution of the population by marital status for the two groups of students. The resulting Chi Square value of 0.01 was less than the expected value of 3.84 for one degree of freedom measured at the .05 level of significance. Marital status, based on the above calculations bears no significant relationship to student transfer success.

Years between high school and college. This study indicates that 82.0 percent of the combined program students entered a college directly after leaving high school and an additional 12.5 percent began their college education within a year of leaving high school. The remaining 5.5 percent of the population commenced their college level studies two or more years after having stopped their high school education.

Data reported in Table 5 indicate that 79.4 percent of the successful transfer students entered a college directly after high school, while 91.0 percent of the non-transfers





Table 5

Frequency and Percentage Distribution of Transfer and Non-transfer Students by Number of Years Between High School and College for Each College and the Total Population  
(not more than two significant figures should be read in the percentages)

College	Years between	Transfers		Non-transfers		Totals	
		f.	%	f.	%	f.	%
G.P.	no years	12	60.0	3	15.0	15	75.0
	1 year	2	10.0	0	0.0	2	10.0
	2 years	0	0.0	1	5.0	1	5.0
	3-5 years	1	5.0	0	0.0	1	5.0
	6-10 years	0	0.0	0	0.0	0	0.0
	11+ years	1	5.0	0	0.0	1	5.0
	Total	16	80.0	4	20.0	20	100.0
M.H.	no years	17	51.5	10	30.3	27	81.8
	1 year	5	15.2	0	0.0	5	15.2
	2 years	1	3.0	0	0.0	1	3.0
	3-5 years	0	0.0	0	0.0	0	0.0
	6-10 years	0	0.0	0	0.0	0	0.0
	11+ years	0	0.0	0	0.0	0	0.0
	Total	23	69.7	10	30.3	33	100.0
C.L.	no years	15	71.4	3	14.3	18	85.7
	1 year	1	4.8	1	4.8	2	9.5
	2 years	0	0.0	0	0.0	0	0.0
	3-5 years	1	4.8	0	0.0	1	4.8
	6-10 years	0	0.0	0	0.0	0	0.0
	11+ years	0	0.0	0	0.0	0	0.0
	Total	17	81.0	4	19.0	21	100.0
R.D.	no years	7	46.7	6	40.0	13	86.7
	1 year	2	13.3	0	0.0	2	13.3
	2 years	0	0.0	0	0.0	0	0.0
	3-5 years	0	0.0	0	0.0	0	0.0
	6-10 years	0	0.0	0	0.0	0	0.0
	11+ years	0	0.0	0	0.0	0	0.0
	Total	9	60.0	6	40.0	15	100.0
Totals	no years	51	79.4	22	91.0	73	82.0
	1 year	10	15.4	1	4.2	11	12.5
	2 years	1	1.5	1	4.2	2	2.2
	3-5 years	2	3.1	0	0.0	2	2.2
	6-10 years	0	0.0	0	0.0	0	0.0
	11+ years	1	1.5	0	0.0	1	1.5
	Total	65	73.0	24	27.0	89	100.0



did so. 15.4 percent of the transfer group entered a college one year after leaving high school compared to 4.2 percent of the non-transfer group. The remaining 6 percent of the transfer group did not enter a college until two or more years after having left high school as compared to 4.2 percent of the non-transfer group.

The above data were subjected to a Chi Square test to determine the relationship between the number of years between high school and college and the students' transfer success. For this purpose, the years 1 to 11+ were combined.

The observed Chi Square value of 2.07 was less than the expected value of 3.84 for one degree of freedom measured at the .05 level of significance. Time between high school and college was statistically unrelated to transfer success.

The frequency and percentage distributions of combined program students, by years between high school and college are reported in Table 5 for each college and the total population.

High school size. Table 6 data report the frequency and percentage distributions of the transfer and non-transfer students, grouped according to college and by the size of high school which they attended. In both the transfer group and the non-transfer group, more than half of the students attended high schools with student enrollments of 101 to 500. For



Table 6

Frequency and Percentage Distribution of Transfer and Non-transfer  
Students by Size of High School Attended for Each College

and the Total Population  
(not more than two significant figures  
should be read in the percentages)

College	High school size	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	0-100	4	20.0	2	10.0	6	30.0
	101-300	7	35.0	0	0.0	7	35.0
	301-500	4	20.0	1	5.0	5	25.0
	501-1000	1	5.0	1	5.0	2	10.0
	1001+	0	0.0	0	0.0	0	0.0
	<u>Total</u>	<u>16</u>	<u>80.0</u>	<u>4</u>	<u>20.0</u>	<u>20</u>	<u>100.0</u>
M.H.	0-100	4	12.1	0	0.0	4	12.1
	101-300	3	9.1	2	6.1	5	15.2
	301-500	8	24.2	4	12.1	12	36.4
	501-1000	5	15.2	3	9.1	8	24.2
	1001+	3	9.1	1	3.0	4	12.1
	<u>Total</u>	<u>23</u>	<u>69.7</u>	<u>10</u>	<u>30.3</u>	<u>33</u>	<u>100.0</u>
C.L.	0-100	0	0.0	1	4.8	1	4.8
	101-300	10	47.6	2	9.5	12	57.1
	301-500	4	19.0	1	4.8	5	23.8
	501-1000	1	4.8	0	0.0	1	4.8
	1001+	2	9.5	0	0.0	2	9.5
	<u>Total</u>	<u>17</u>	<u>81.0</u>	<u>4</u>	<u>19.0</u>	<u>21</u>	<u>100.0</u>
R.D.	0-100	1	6.7	0	0.0	1	6.7
	101-300	0	0.0	1	6.7	1	6.7
	301-500	2	13.3	2	13.3	4	26.7
	501-1000	2	13.3	0	0.0	2	13.3
	1001+	4	26.7	3	20.0	7	46.7
	<u>Total</u>	<u>9</u>	<u>60.0</u>	<u>6</u>	<u>40.0</u>	<u>15</u>	<u>100.0</u>
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Totals	0-100*	9	13.8	3	12.5	12	13.5
	101-300*	20	30.8	5	20.8	25	28.1
	301-500	18	27.7	8	33.3	26	29.2
	501-1000**	9	13.8	4	16.7	13	14.6
	1001+**	9	13.8	4	16.7	13	14.6
	<u>Total</u>	<u>65</u>	<u>73.0</u>	<u>24</u>	<u>27.0</u>	<u>89</u>	<u>100.0</u>

\*Combined for ( $\chi^2$ ) Analysis      \*\*Combined for ( $\chi^2$ ) Analysis



high schools of 500 or more students, about 28 percent of the transfer group attended compared to 33 percent of the non-transfers. 57 percent of the total population attended high schools of 101 to 500 students and 29 percent attended high schools with enrollments of greater than 500 students.

A Chi Square test applied to the total population determined a Chi Square value of 0.62 for the relationship between size of high school attended and transfer success. This number was much less than the expected Chi Square value of 5.99 for two degrees of freedom measured at the .05 level of significance. No relationship exists between size of high school attended and transfer success.

Year of college attendance. Data recorded in Table 7 show the distributions of the transfer population and the non-transfer population by year of attendance at each of the colleges. Approximately 85 percent of the combined program students attended college for one year. The additional 15 percent were enrolled in a college for two full years. The percentage of transfer students who were enrolled in a college for two years was slightly greater, 15.3 percent than for non-transfer students, 12.5 percent. This is to be expected since a second year at college constituted a repeated year, which in turn should have enhanced the student's chances to transfer to a university.





Table 7

Frequency and Percentage Distribution of Transfer and Non-transfer  
Students by Year of Attendance for Each College and the  
Total Population  
(not more than two significant figures  
should be read in the percentages)

College	Year of Attend.	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	66-67	2	10.0	1	5.0	3	15.0
	67-68	1	5.0	0	0.0	1	5.0
	68-69	9	45.0	2	10.0	11	55.0
	66-68	1	5.0	0	0.0	1	5.0
	67-69	3	15.0	1	5.0	4	20.0
	<u>Total</u>	<u>16</u>	<u>80.0</u>	<u>4</u>	<u>20.0</u>	<u>20</u>	<u>100.0</u>
M.H.	66-67	1	3.0	1	3.0	2	6.1
	67-68	5	15.2	6	18.2	11	33.3
	68-69	11	33.3	3	9.1	14	42.4
	66-68	2	6.1	0	0.0	2	6.1
	67-69	4	12.1	0	0.0	4	12.1
	<u>Total</u>	<u>23</u>	<u>69.7</u>	<u>10</u>	<u>30.3</u>	<u>33</u>	<u>100.0</u>
C.L.	66-67	11	52.5	1	4.8	12	57.3
	67-68	4	19.0	1	4.8	5	23.8
	68-69	2	9.5	0	0.0	2	9.5
	66-68	0	0.0	0	0.0	0	0.0
	67-69	0	0.0	2	9.4	2	9.5
	<u>Total</u>	<u>17</u>	<u>81.0</u>	<u>4</u>	<u>19.0</u>	<u>21</u>	<u>100.0</u>
R.D.	66-67	0	0.0	0	0.0	0	0.0
	67-68	5	33.3	1	6.7	6	40.0
	68-69	4	26.7	5	33.3	9	60.0
	66-68	0	0.0	0	0.0	0	0.0
	67-69	0	0.0	0	0.0	0	0.0
	<u>Total</u>	<u>9</u>	<u>60.0</u>	<u>6</u>	<u>40.0</u>	<u>15</u>	<u>100.0</u>
Totals	66-67*	14	21.6	3	12.5	17	19.1
	67-68*	15	23.1	8	33.3	23	25.9
	68-69*	26	40.0	10	41.7	36	40.3
	66-68	3	4.6	0	0.0	3	3.4
	67-69	7	10.7	3	12.5	10	11.3
	<u>Total</u>	<u>65</u>	<u>73.0</u>	<u>24</u>	<u>27.0</u>	<u>89</u>	<u>100.0</u>

\*For ( $\chi$ )<sup>2</sup> Analysis, only the individual years were considered



Upon testing the relationship of year of college attendance to transfer success by means of the Chi Square test, an observed value of 2.63 resulted. This value was less than the expected value of 5.99 for two degrees of freedom measured at the .05 level of significance. There is no relationship between the year of college attendance and transfer success.

#### Personal Opinions and Ratings

Transfer certainty, reasons for selecting a combined program, counselling ratings and alternatives to combined programs as expressed by the combined program student population are presented in the following section of this chapter.

Transfer certainty expressed by combined program students. In response to the question 'When you first enrolled in college, how certain were you about transferring to a university to complete your undergraduate studies?', 87 percent of the total population reported that they were fairly certain that they would transfer, 18 percent indicated they were undecided and 1 percent reported that they were fairly certain that they would not transfer. The data in Table 8 indicate that about 91 percent of the successful transfers were fairly certain about transferring to a university when they first entered a college, and about 9 percent were undecided. Of the non-transfer students, 54



percent recorded that they were fairly certain about transferring when they first entered a college, about 42 percent were undecided and one percent were fairly certain that they would not transfer at the end of their college year. This finding cannot be considered as dependable since the students' opinions of their transfer certainty of one or more years ago may have been influenced by their transfer success following college.

The Chi Square test was applied to the distributions of the total population based on transfer certainty and transfer success. The observed Chi Square value of 14.15 was greater than the expected value of 3.84 for one degree of freedom measured at the .05 level of significance. Based on the above finding there is a significant positive relationship between the students' expectations concerning their ability to transfer to a university following college and their actual transfer success. This finding however, as was previously mentioned, cannot be considered reliable since transfer certainty was recorded post facto. To eliminate this problem student certainty towards transfer must be ascertained when the students first enter a college with a subsequent follow-up after they leave the college.

Reasons for enrolling in a combined program. Five reasons were given by the combined program students for having enrolled in college combined programs. The data in



Table 8

Frequency and Percentage Distribution of Transfer and Non-transfer  
Students' Responses to Transfer Certainty for Each College  
and the Total Population  
(not more than two significant figures  
should be read in the percentages)

College	Transfer certainty	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	Fairly C.*	13	65.0	3	15.0	16	80.0
	Uncertain	3	15.0	1	5.0	4	20.0
	Fairly U.**	0	0.0	0	0.0	0	0.0
	Total	16	80.0	4	20.0	20	100.0
M.H.	Fairly C.	22	66.7	4	12.1	26	78.8
	Uncertain	1	3.0	6	18.2	7	21.2
	Fairly U.	0	0.0	0	0.0	0	0.0
	Total	23	69.7	10	30.3	33	100.0
C.L.	Fairly C.	16	76.2	2	9.5	18	85.7
	Uncertain	1	4.8	1	4.8	2	9.5
	Fairly U.	0	0.0	1	4.8	1	4.8
	Total	17	81.0	4	19.0	21	100.0
R.D.	Fairly C.	8	53.3	4	26.7	12	80.0
	Uncertain	1	6.7	2	13.3	3	20.0
	Fairly U.	0	0.0	0	0.0	0	0.0
	Total	9	60.0	6	40.0	15	100.0
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Totals	Fairly C.	59	90.7	13	54.2	72	80.9
	Uncertain***	6	9.3	10	41.7	16	18.0
	Fairly U.***	0	0.0	1	4.1	1	1.1
	Total	65	73.0	24	27.0	89	100.0

\*Fairly certain I would transfer to a university

\*\*Fairly certain I would not transfer to a university

\*\*\*Combined for  $\chi^2$  Analysis





Table 9 illustrate the frequency and percentage distributions of the students by their reasons for enrolling in a combined program and their transfer success for each college and the total population. Nearly 50 percent of the population indicated time -- they could not gain acceptance into a university and therefore did not wish to waste time at starting university level studies -- as a reason for enrolling in a combined program. In approximately 8 percent of the responses, practical reasons were given such as 'closeness to home and lower tuition rates at college than at university'. 13.5 percent of the population expressed that they enrolled in a college program because 'the college offered a more intellectual and stimulating atmosphere than a high school and offered better preparation for university'. About 10 percent stated they 'enrolled in a college program because of influence from parents, friends or relations'. A small percentage, 1 percent, indicated they entered a combined program as 'a means to a better job' and about 19 percent gave no reason.

Table 9 records that a greater percentage of the transfer group, 54 percent, indicated time as a reason for enrolling in a combined program, than did the non-transfers, about 3 percent. More of the non-transfers, 21 percent, than transfers, about 7 percent, indicated they were influenced by others to enroll in a combined program at college.

The Chi Square test could not be applied to determine the significance of the relationship between the reasons given by the students for taking a combined program and their subsequent transfer success, because of the small expected cell frequencies. Categories could not be combined to create larger expected frequencies because



Table 9

Frequency and Percentage Distribution of Transfer and Non-transfer Students by Reasons for Enrolling in a Combined Program for Each College and the Total Population (not more than two significant figures should be read in the percentages)

College	Reasons for program choice	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	Time	11	55.0	2	10.0	13	65.0
	Practical	2	10.0	0	0.0	2	10.0
	Atmosphere	0	0.0	0	0.0	0	0.0
	Influence	0	0.0	2	10.0	2	10.0
	Job route	0	0.0	0	0.0	0	0.0
	No reply	3	15.0	0	0.0	3	15.0
	Total	16	80.0	4	20.0	20	100.0
M.H.	Time	14	42.4	4	12.1	18	54.5
	Practical	0	0.0	0	0.0	0	0.0
	Atmosphere	5	15.2	3	9.1	8	24.3
	Influence	2	6.1	2	6.1	4	12.1
	Job route	0	0.0	1	3.0	1	3.0
	No reply	2	6.1	0	0.0	2	6.1
	Total	23	69.7	10	30.3	33	100.0
C.L.	Time	7	33.3	2	9.5	9	42.9
	Practical	2	9.5	1	4.8	3	14.3
	Atmosphere	3	14.3	0	0.0	3	14.3
	Influence	2	9.5	0	0.0	2	9.5
	Job route	0	0.0	0	0.0	0	0.0
	No reply	3	14.3	1	4.8	4	19.1
	Total	17	81.0	4	19.0	21	100.0
R.D.	Time	3	20.0	0	0.0	3	20.0
	Practical	0	0.0	2	13.3	2	13.3
	Atmosphere	1	6.7	0	0.0	1	6.7
	Influence	0	0.0	1	6.7	1	6.7
	Job route	0	0.0	0	0.0	0	0.0
	No reply	5	33.3	3	20.0	8	53.3
	Total	9	60.0	6	40.0	15	100.0
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Totals	Time	35	54.0	8	33.4	43	48.3
	Practical	4	6.1	3	12.5	7	7.9
	Atmosphere	9	13.8	3	12.5	12	13.5
	Influence	4	6.1	5	20.8	9	10.1
	Job route	0	0.0	1	1.1	1	1.1
	No reply	13	20.0	4	16.7	17	19.1
	Total	65	73.0	24	27.0	89	100.0



of the nature of the categories.

Student rating of college counselling. As a group, about 12 percent of the population indicated that they received excellent counselling while in college, 18 percent reported the college counselling as good, about 26 percent as fair, 21 percent as poor and about 23 percent reported they received no counselling. Table 10 indicates that very little difference exists between the responses of the transfer students and the non-transfer students with regard to college counselling. A Chi Square test concurs with this observation.

The observed Chi Square value of 0.16 is much less than the required value of 9.49 for significance with four degrees of freedom and measured at the .05 level of significance and upholds the observation that no difference exists in the distribution of transfer and non-transfer students according to the way they rated their college counselling.

The Chi Square test was also employed to determine if among college differences existed in the counselling ratings assigned by the total combined program student population of each college. The data from the totals column of Table 10 produced a Chi Square value of 7.43. The value of Chi Square required for significance at the .05 level for 6 degrees of freedom is 12.59. No difference was observed to exist among the four colleges based on student ratings of college counselling.

Alternative schooling selection. Approximately 62 percent of the population indicated they would re-enroll in a combined program to complete their matriculation if they were able to repeat



Table 10

Frequency and Percentage Distribution of Transfer and Non-transfer Students by Counselling Ratings for Each College and the Total Population  
(not more than two significant figures should be read in the percentages)

College	Counsel. rating	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	Excellent	3	15.0	1	5.0	8	20.0
	Good	5	25.0	0	0.0	5	25.0
	Fair	3	15.0	2	10.0	5	25.0
	Poor	4	20.0	1	5.0	5	25.0
	No counsel.	1	5.0	0	0.0	1	5.0
	Total	16	80.0	4	20.0	20	100.0
M.H.	Excellent	1	3.0	1	3.0	2	6.0
	Good	3	9.1	2	6.1	5	15.2
	Fair	9	27.3	0	0.0	9	27.3
	Poor	5	15.2	3	9.1	8	24.2
	No counsel.	5	15.2	4	12.1	9	27.3
	Total	23	69.7	10	30.3	33	100.0
C.L.	Excellent	2	9.5	1	4.8	3	14.3
	Good	0	0.0	1	4.8	1	4.8
	Fair	5	23.8	2	9.5	7	33.3
	Poor	5	23.8	0	0.0	5	23.8
	No counsel.	5	23.8	0	0.0	5	23.8
	Total	17	81.0	4	19.0	21	100.0
R.D.	Excellent	2	13.3	0	0.0	2	13.3
	Good	4	26.7	1	6.7	5	33.3
	Fair	0	0.0	2	13.3	2	13.3
	Poor	0	0.0	1	6.7	1	6.7
	No counsel.	3	20.0	2	13.3	5	33.3
	Total	9	60.0	6	40.0	15	100.0
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Totals	Excellent*	8	12.3	3	12.5	11	12.3
	Good*	12	18.5	4	16.7	16	18.0
	Fair	17	26.2	6	25.0	23	25.8
	Poor**	14	21.5	5	20.0	19	21.4
	No counsel.**	14	21.5	6	25.0	20	22.5
	Total	65	73.0	24	27.0	89	100.0

\*Combined for  $(\chi)^2$  Analysis    \*\*Combined for  $(\chi)^2$  Analysis







their education. Nearly 25 percent reported they would complete their matriculation at high school, night school or by correspondence. Table 11 shows that just over 3 percent would not re-enroll in a college but would enter the work force and about 10 percent would attempt some other post-secondary studies in place of the university transfer program.

Of the transfer group, about 67 percent indicated they would repeat their college experience while 50 percent of the non-transfer group indicated they would do so. Those students who indicated that they would complete their high school matriculation at a high school, at night school or by correspondence constituted about 23 percent of the transfer group and 29 percent of the non-transfer group. 1.5 percent of the transfer students recorded they would go directly into the work force compared with 8.4 percent of the non-transfers. 9.2 percent of the transfer students reported they would pursue some post-secondary education other than college compared to 12.5 percent of the non-transfers.

From Table 11 the total distributions of the transfer and non-transfer students from the four colleges were subjected to Chi Square analysis to determine the relationship between student transfer success and their alternate educational choices. An observed Chi Square value of 2.90 resulted. The value of Chi Square required for significance at the .05 level for two degrees of freedom is 5.99. No significant relationship was found to exist between student transfer success and the choices they would now make concerning completion of their high school matriculation courses.

The column totals of Table 11 were subjected to the Chi



Table 11

Frequency and Percentage Distribution of Transfer and Non-transfer Students' Responses to Alternatives to Schooling Options for Each College and the Total Population  
(not more than two significant figures should be read in the percentages)

College	Alternate choices	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	Combined P.*	10	50.0	2	10.0	12	60.0
	H. school	5	25.0	2	10.0	7	35.0
	Employment	0	0.0	0	0.0	0	0.0
	Other P.2dy**	1	5.0	0	0.0	1	5.0
	Total	16	80.0	4	20.0	20	100.0
M.H.	Combined P.	15	45.5	6	18.2	21	63.6
	H.school	7	21.1	2	6.0	9	27.3
	Employment	0	0.0	0	0.0	0	0.0
	Other P.2dy	1	3.0	2	6.0	3	9.1
	Total	23	69.7	10	30.3		
C.L.	Combined P.	12	57.1	1	4.8	13	61.9
	H. school	2	9.6	2	9.6	4	24.1
	Employment	1	4.8	1	4.8	2	9.5
	Other P.2dy	2	9.5	0	0.0	2	9.5
	Total	17	81.0	4	19.0	21	100.0
R.D.	Combined P.	6	40.0	3	20.0	9	60.0
	H. school	1	6.7	1	6.7	2	13.4
	Employment	0	0.0	1	6.7	1	6.7
	Other P.2dy	2	13.3	1	6.7	3	20.0
	Total	9	60.0	6	40.0	15	100.0
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Totals	Combined P.	43	67.2	12	50.0	55	61.8
	H. school***	15	23.1	7	29.1	22	24.7
	Employment***	1	1.5	2	8.4	3	3.4
	Other P.2dy***	6	9.2	3	12.5	9	10.1
	Total	65	73.0	24	27.0	89	100.0

\*Program \*\*Post-secondary institutions

\*\*\*Combined for (X)<sup>2</sup> Analysis



Square test to determine if a significant difference existed among the colleges on the basis of the distribution of students' responses to schooling options. The resulting Chi Square value of 0.09 was less than the expected Chi Square value of 7.82 for 3 degrees of freedom measured at the .05 level of significance. There were no differences among the colleges based on the distribution of their combined program students' responses to 'alternatives to schooling options'.

### High School Academic Performance and Transfer Success

High school English marks, high school Mathematics-Science averages, matriculation averages and the number of matriculation courses failed are reported in this section as they relate to transfer success.

English marks. Table 12 shows that the combined program student population consisted primarily of students who achieved high school English marks of 50 to 75 percent. Almost 41 percent of the population had marks in English of 50-59, 17 percent from 60-65 and nearly 24 percent had marks from 66-75. Only about seven percent of this group had English marks of less than 50. No record of English marks was available for 4.5 percent of the population.

On comparing the transfer group to the non-transfer group, 7.6 percent of the former group had less than 50 percent in high school English while only 4.2 percent of the non-transfers did so. Marks of 50-59 were achieved in English by 42 percent of the transfer group and 38 percent of the non-transfer students. 49 percent of the successful transfers and almost 46 percent of the non-trans-



Table 12

Frequency and Percentage Distribution of Transfer and Non-transfer  
Students by High School English Mark for Each College and  
the Total Population  
(not more than two significant figures  
should be read in the percentages)

College	English mark	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	0-49	1	5.0	1	5.0	2	10.0
	50-59	6	30.0	2	10.0	8	40.0
	60-65	4	20.0	1	5.0	5	25.0
	66-75	3	15.0	0	0.0	3	15.0
	76-100	2	10.0	0	0.0	2	10.0
	No results	0	0.0	0	0.0	0	0.0
	Total	16	80.0	4	20.0	20	100.0
M.H.	0-49	1	3.0	0	0.0	1	3.0
	50-59	12	36.4	3	9.1	15	45.5
	60-65	4	12.1	3	9.1	7	21.2
	66-75	5	15.2	3	9.1	8	24.3
	76-100	1	3.0	0	0.0	1	3.0
	No results	0	0.0	1	3.0	1	3.0
	Total	23	69.7	10	30.3	33	100.0
C.L.	0-49	1	4.8	0	0.0	1	4.8
	50-59	7	33.3	2	9.4	9	42.7
	60-65	0	0.0	0	0.0	0	0.0
	66-75	6	28.6	0	0.0	6	28.6
	76-100	2	9.5	1	4.8	3	14.3
	No results	1	4.8	1	4.8	2	9.6
	Total	17	81.0	4	19.0	21	100.0
R.D.	0-49	2	13.3	0	0.0	2	13.3
	50-59	2	13.3	2	13.3	4	26.6
	60-65	3	20.1	1	6.7	4	26.6
	66-75	2	13.3	2	13.3	4	26.6
	76-100	0	0.0	0	0.0	0	0.0
	No results	0	0.0	1	6.7	1	6.7
	Total	9	60.0	6	40.0	15	100.0
Totals	0-49	5	7.6	1	4.2	6	6.7
	50-59	27	41.7	9	37.5	36	40.8
	60-65 *	11	16.9	5	20.8	16	17.7
	66-75 *	16	24.7	5	20.8	21	23.6
	76-100 *	5	7.6	1	4.2	6	6.7
	No results **	1	1.5	3	12.5	4	4.5
	Total	65	73.0	24	27.0	89	100.0

\*Combined for  $(\chi)^2$  Analysis    \*\*Not included in  $(\chi)^2$  Analysis





fers had high school English marks of 60 or more.

On comparing the relationship between the transfer group and the non-transfer group according to their distribution by high school English marks, a Chi Square value of 0.23 was computed. For a significant difference to exist between the two distributions at the .05 level of significance the observed value must be greater than the theoretical value of 5.99 based on two degrees of freedom. There is no significant relationship between high school English marks and student transfer success.

Mathematics-Science averages. Of the 89 combined program students, nearly 6 percent had less than a 50 percent average in their high school Mathematics and Science courses, close to 60 percent had marks of 50-59 and nearly 34 percent had marks of 60 or greater. On comparing the Mathematics-Science averages between the transfers and non-transfers, 4.6 percent of the transfer group scored less than 50 to 8.4 percent of the non-transfers for the same mark range. Nearly 65 percent of the transfers had averages of 50-59 compared to 58.4 percent of the non-transfers.

In comparing the two groups for averages of 60 or greater, 30 percent of the transfer group scored better than 60 and 46 percent of the non-transfers did so. The data for the distributions of the two groups by high school Mathematics-Science averages are reported in Table 13.

The Chi Square test was used to determine the distributions of the Mathematics-Science averages of the non-transfer and transfer students. Applied to the total distributions at the bottom of Table 13, the Chi Square test produced a value of 4.39. Measured



Table 13

Frequency and Percentage Distribution of Transfer and Non-transfer  
Students by Mathematics-Science Averages for Each College

and the Total Population  
(not more than two significant figures  
should be read in the percentages)

College	Math-Sc. average	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	0-49	0	0.0	1	5.0	1	5.0
	50-59	9	45.0	1	5.0	10	50.0
	60-65	5	25.0	1	5.0	6	30.0
	66-75	2	10.0	1	5.0	3	15.0
	76-100	0	0.0	0	0.0	0	0.0
	No results	0	0.0	0	0.0	0	0.0
	Total	16	80.0	4	20.0	20	100.0
M.H.	0-49	2	6.1	1	3.0	3	9.1
	50-59	13	39.4	5	15.2	18	54.5
	60-65	6	18.2	3	9.1	9	27.3
	66-75	2	6.1	1	3.0	3	9.1
	76-100	0	0.0	0	0.0	0	0.0
	No results	0	0.0	0	0.0	0	0.0
	Total	23	69.7	10	30.3	33	100.0
C.L.	0-49	0	0.0	0	0.0	0	0.0
	50-59	14	66.7	2	9.5	16	76.2
	60-65	2	9.5	1	4.8	3	14.3
	66-75	0	0.0	0	0.0	0	0.0
	76-100	0	0.0	0	0.0	0	0.0
	No results	1	4.8	1	4.8	2	9.5
	Total	17	81.0	4	19.0	21	100.0
R.D.	0-49	1	6.7	0	0.0	1	6.7
	50-59	6	40.0	2	13.3	8	53.3
	60-65	1	6.7	2	13.3	3	20.0
	66-75	1	6.7	1	6.7	2	13.3
	76-100	0	0.0	1	6.7	1	6.7
	No results	0	0.0	0	0.0	0	0.0
	Total	9	60.0	6	40.0	15	100.0
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Totals	0-49	3	4.6	2	2.4	5	5.7
	50-59	42	64.5	10	41.7	52	58.4
	60-65*	14	21.6	7	29.6	21	23.6
	66-75*	5	7.8	3	12.6	8	9.0
	76-100*	0	0.0	1	4.2	1	1.1
	No results**	1	1.5	1	4.2	2	2.2
	Total	65	73.0	24	27.0	89	100.0

\*Combined for  $\chi^2$  Analysis    \*\*Not included in  $\chi^2$  Analysis



Table 14

Frequency and Percentage Distribution of Transfer and Non-transfer  
Students by High School Matriculation Averages for Each  
College and the Total Population  
(not more than two significant figures  
should be read in the percentages)

College	High S. matric. average	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	0-49	2	10.0	0	0.0	2	10.0
	50-59	9	45.0	4	20.0	13	65.0
	60-65	3	15.0	0	0.0	3	15.0
	66-75	1	5.0	0	0.0	1	5.0
	76-100	1	5.0	0	0.0	1	5.0
	No results	0	0.0	0	0.0	0	0.0
	Total	16	80.0	4	20.0	20	100.0
M.H.	0-49	0	0.0	0	0.0	0	0.0
	50-59	16	48.4	5	15.2	21	63.6
	60-65	3	9.1	3	9.1	6	18.2
	66-75	4	12.1	2	6.1	6	18.2
	76-100	0	0.0	0	0.0	0	0.0
	No results	0	0.0	0	0.0	0	0.0
	Total	23	69.7	10	30.3	33	100.0
C.L.	0-49	1	4.8	0	0.0	1	4.8
	50-59	10	47.6	2	9.5	12	57.1
	60-65	4	19.0	1	4.8	5	23.8
	66-75	1	4.8	0	0.0	1	4.8
	76-100	0	0.0	0	0.0	0	0.0
	No results	1	4.8	1	4.8	2	9.6
	Total	17	81.0	4	19.0	21	100.0
R.D.	0-49	0	0.0	0	0.0	0	0.0
	50-59	7	46.7	2	13.3	9	60.0
	60-65	2	13.3	4	26.7	6	40.0
	66-75	0	0.0	0	0.0	0	0.0
	76-100	0	0.0	0	0.0	0	0.0
	No results	0	0.0	0	0.0	0	0.0
	Total	9	60.0	6	40.0	15	100.0
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Totals	0-49	3	4.6	0	0.0	3	3.4
	50-59	42	64.5	13	54.1	55	61.8
	60-65*	12	18.4	8	33.3	20	22.5
	66-75*	6	9.2	2	8.4	8	9.0
	76-100*	1	1.5	0	0.0	1	1.1
	No results**	1	1.5	1	4.2	2	2.2
	Total	65	73.0	24	27.0	89	100.0

\*Combined for  $\chi^2$  Analysis    \*\*Not included in  $\chi^2$  Analysis



at the .05 level of significance for 2 degrees of freedom, the required value is 5.99. No significant relationship exists between high school Mathematics-Science averages and transfer success.

High school matriculation averages. Table 14 shows the distributions of transfer and non-transfer students by high school matriculation averages. Of 89 students, 3.4 percent had matriculation averages of less than 50, about 62 percent had averages between 50 and 59 and 33.5 percent had averages of 60 percent or greater.

The transfer group showed nearly 5 percent with failing matriculation averages and 64.5 percent with averages of 50 to 59 and about 29 percent with matriculation averages of 60 or more. The non-transfers are recorded in Table 14 with none registering a failing average, about 54 percent with averages between 50 and 59, and about 42 percent showing matriculation averages of 60 percent or more.

On testing the relationship between the transfer and non-transfer students based on their distributions by high school matriculation averages, a Chi Square value of 4.38 resulted. This value was less than the theoretical Chi Square value of 5.99 required for significance at the .05 level for 2 degrees of freedom. No significant relationship exists between high school matriculation averages and transfer success.

Matriculation courses failed. 49 percent of the population were recorded in Table 15 as having failed one or more matriculation courses once. Almost 25 percent were recorded as having failed one or more matriculation courses two or more times each. Of the 65 transfer students, about 59 percent had failed one or more





courses at least once. The 24 non-transfer students were recorded with 46 percent failing one or more courses once, and 25 percent failing one or more courses at least twice.

The Chi Square test was applied to the total frequency distributions of Table 15 to determine the relationship between the two groups of students based on the number of courses failed once and on the number of courses failed twice. The computed Chi Square values are 1.06 and 1.39 respectively. Both of these values are less than the expected Chi Square value of 5.99 for two degrees of freedom and measured at the .05 level of significance. There is no significant relationship between the number of matriculation courses failed once or two or more times and transfer success.

#### College Performance

Matriculation equivalent averages and college grade point averages are reported in this section as they relate to transfer success.

Matriculation equivalent averages. The frequency and percentage distributions of the combined program students' transfer success measured against their high school matriculation averages are reported in Table 16. Of the 89 students in the population, 14.5 percent had a failing average in the colleges' matriculation equivalent subjects, nearly 34 percent had averages of 50 to 59, 45 percent had averages of 60 or more and 8 percent withdrew from the courses before recording any marks.

Of the transfer group, 35.4 percent had averages between 50 and 59 and about 52 percent had matriculation equivalent averages



Table 15

Frequency and Percentage Distribution of Transfer and Non-transfer  
Students by High School Course Failures for Each College  
and the Total Population

(not more than two significant figures  
should be read in the percentages)

College	Number times failed	Number failed	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>		
			f.	%	f.	%	f.	%	
G.P.	Failed once	Nil	7	35.0	0	0.0	7	35.0	
		One	4	20.0	2	10.0	6	30.0	
		Two+	5	25.0	2	10.0	7	35.0	
		Total	16	80.0	4	20.0	20	100.0	
	Failed twice	Nil	11	55.0	3	15.0	14	70.0	
		One	5	25.0	1	5.0	6	30.0	
		Two+	0	0.0	0	0.0	0	0.0	
		Total	16	80.0	4	20.0	20	100.0	
	M.H.	Failed once	Nil	9	27.3	5	15.1	14	42.4
			One	7	21.2	2	6.1	9	27.3
Two+			7	21.2	3	9.1	10	30.3	
Total			23	69.7	10	30.3	33	100.0	
Failed twice		Nil	20	60.6	8	24.2	28	84.8	
		One	2	6.1	1	3.0	3	9.1	
		Two+	1	3.0	1	3.0	2	6.1	
		Total	23	69.7	10	30.3	33	100.0	
C.L.		Failed once	Nil	9	42.9	2	9.5	11	52.4
			One	4	19.0	1	4.8	5	23.8
	Two+		4	19.1	1	4.8	5	23.8	
	Total		17	81.0	4	19.0	21	100.0	
	Failed twice	Nil	10	47.7	3	14.2	13	61.9	
		One	2	9.5	1	4.8	3	14.3	
		Two+	5	23.8	0	0.0	5	23.8	
		Total	17	81.0	4	19.0	21	100.0	
	R.D.	Failed once	Nil	2	13.3	6	40.0	8	53.3
			One	2	13.3	0	0.0	2	13.3
Two+			5	33.4	0	0.0	5	33.4	
Total			9	60.0	6	40.0	15	100.0	
Failed twice		Nil	8	53.3	4	26.7	12	80.0	
		One	0	0.0	2	13.3	2	13.3	
		Two+	1	6.7	0	0.0	1	6.7	
		Total	9	60.0	6	40.0	15	100.0	



Table 15 (continued)

College	Number times failed	Number failed	<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
			f.	%	f.	%	f.	%
Totals	Failed once	Nil	27	41.5	13	54.2	40	45.0
		One	17	26.2	5	20.8	22	24.7
		<u>Two+</u>	<u>21</u>	<u>32.3</u>	<u>6</u>	<u>25.2</u>	<u>27</u>	<u>30.3</u>
		<u>Total</u>	<u>65</u>	<u>73.0</u>	<u>24</u>	<u>27.0</u>	<u>89</u>	<u>100.0</u>
	Failed twice	Nil	49	75.5	18	75.0	67	75.2
		One	9	13.8	5	20.8	14	15.8
		<u>Two+</u>	<u>7</u>	<u>10.7</u>	<u>1</u>	<u>4.2</u>	<u>8</u>	<u>9.0</u>
		<u>Total</u>	<u>65</u>	<u>73.0</u>	<u>24</u>	<u>27.0</u>	<u>89</u>	<u>100.0</u>

of 60 percent or more. The remaining 12.3 percent either failed their matriculation equivalent courses or withdrew from these courses before recording a mark. The students constituting the above 12.3 percent were permitted to transfer to a university on the strength of their college level averages and on the condition that they would complete their high school matriculation before graduation from university.

Within the non-transfer group, 37.5 percent had failing grades, 29 percent had averages of 50 to 59, 25 percent had grades of 60 or better and 8.4 percent withdrew from the courses before recording any marks.

Upon testing the relationship between college matriculation equivalent averages and transfer success by means of Chi Square analysis applied to the distribution totals of Table 16, a Chi Square value of 20.70 was determined. For 2 degrees of freedom, a Chi Square of 20.70 is significant at better than the .05 level. The data provided conclusive evidence that there is a significant positive



Table 16

Frequency and Percentage Distribution of Transfer and Non-transfer Students by Matriculation Equivalents Averages for Each College and the Total Population (not more than two significant figures should be read in the percentages)

College	Matric. Equiv. average	Transfers		Non-transfers		Totals	
		f.	%	f.	%	f.	%
G.P.	0-49	1	5.0	2	10.0	3	15.0
	50-59	9	45.0	1	5.0	10	50.0
	60-65	3	15.0	0	0.0	3	15.0
	66-75	2	10.0	1	5.0	3	15.0
	76-100	1	5.0	0	0.0	1	5.0
	No results	0	0.0	0	0.0	0	0.0
	Total	16	80.0	4	20.0	20	100.0
M.H.	0-49	0	0.0	3	9.1	3	9.1
	50-59	5	15.2	4	12.1	9	27.3
	60-65	7	21.2	1	3.0	8	24.2
	66-75	8	24.2	2	6.1	10	30.3
	76-100	3	9.1	0	0.0	3	9.1
	No results	0	0.0	0	0.0	0	0.0
	Total	23	69.7	10	30.3	33	100.0
C.L.	0-49	1	4.8	2	9.5	3	14.3
	50-59	7	33.3	1	4.8	8	38.1
	60-65	3	14.3	0	0.0	3	14.3
	66-75	4	19.0	0	0.0	4	19.0
	76-100	1	4.8	0	0.0	1	4.8
	No results	1	4.8	1	4.8	2	9.5
	Total	17	81.0	4	19.0	21	100.0
R.D.	0-49	1	6.7	2	13.2	3	19.9
	50-59	2	13.2	1	6.7	3	19.9
	60-65	1	6.7	1	6.7	2	13.2
	66-75	1	6.7	1	6.7	2	13.2
	76-100	0	0.0	0	0.0	0	0.0
	No results	4	26.7	1	6.7	5	33.4
	Total	9	60.0	6	40.0	15	100.0
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Totals	0-49	3	4.6	9	37.5	12	14.5
	50-59	23	35.4	7	29.1	30	33.7
	60-65*	14	21.6	2	8.4	16	18.0
	66-75*	15	23.0	4	16.6	19	21.3
	76-100*	5	7.7	0	0.0	5	5.6
	No results**	5	7.7	2	8.4	7	7.9
	Total	65	73.0	24	27.0	89	100.0

\*Combined for  $\chi^2$  Analysis    \*\*Not included in  $\chi^2$  Analysis





relationship between college high school matriculation equivalent averages and transfer success.

College grade point averages. One percent of the population withdrew from college before recording a college grade point average and 45 percent registered grade point averages below 2.0. 45 percent scored averages between 2.0 and 3.0 and nine percent achieved averages of 3.0 or greater.

Within the transfer group, 34 percent had college grade point averages of less than 2.0, 55 percent between 2.0 and 3.0 and about 11 percent had grade point averages of 3.0 or more. In comparison to this group, the non-transfer group is recorded in Table 17 showing 4.2 percent as having withdrawn from college before recording marks, 75 percent with less than 2.0 for a grade point average, 16.3 percent with grade point averages between 2.0 and 3.0 and 4.1 percent with averages of 3.0 or greater.

A Chi Square test of the relationship between college grade point average and student transfer success based on the Table 17 total frequencies yielded a Chi Square value of 9.42. This value was greater than the theoretical value of 3.84 required for significance at the .05 level for 1 degree of freedom. A significant relationship exists between the combined program students' college grade point averages and their transfer success.

#### Summary of Chapter 5

The two groups which constituted the total population, the transfer group and the non-transfer group, were examined in this chapter to determine which background factors, if any, were related.



Table 17

Frequency and Percentage Distribution of Transfer and Non-transfer Students by College Grade Point Averages (G.P.A.) for Each College and the Total Population  
(not more than two significant figures should be read in the percentages)

College G.P.A.		<u>Transfers</u>		<u>Non-transfers</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%
G.P.	Withdrawals	0	0.0	1	5.0	1	5.0
	Less than 2.0	5	25.0	3	15.0	8	40.0
	2.0-2.9	9	45.0	0	0.0	9	45.0
	3.0-4.0	2	10.0	0	0.0	2	10.0
	<u>Total</u>	<u>16</u>	<u>80.0</u>	<u>4</u>	<u>20.0</u>	<u>20</u>	<u>100.0</u>
M.H.	Withdrawals	0	0.0	0	0.0	0	0.0
	Less than 2.0	12	36.3	9	27.3	21	63.6
	2.0-2.9	9	27.3	0	0.0	9	27.3
	3.0-4.0	2	6.1	1	3.0	3	9.1
	<u>Total</u>	<u>23</u>	<u>69.7</u>	<u>10</u>	<u>30.0</u>	<u>33</u>	<u>100.0</u>
C.L.	Withdrawals	0	0.0	0	0.0	0	0.0
	Less than 2.0	3	14.3	2	9.5	5	23.8
	2.0-2.9	12	57.2	2	9.5	14	66.7
	3.0-4.0	2	9.6	0	0.0	2	9.6
	<u>Total</u>	<u>17</u>	<u>81.0</u>	<u>4</u>	<u>19.0</u>	<u>21</u>	<u>100.0</u>
R.D.	Withdrawals	0	0.0	0	0.0	0	0.0
	Less than 2.0	2	13.3	4	26.7	6	40.0
	2.0-2.9	6	40.0	2	13.3	8	53.3
	3.0-4.0	1	6.7	0	0.0	1	6.7
	<u>Total</u>	<u>9</u>	<u>60.0</u>	<u>6</u>	<u>40.0</u>	<u>15</u>	<u>100.0</u>
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Totals	Withdrawals*	0	0.0	1	4.2	1	1.1
	Less than 2.0*	22	33.9	18	75.0	40	45.0
	2.0-2.9**	36	55.4	4	16.3	40	45.0
	3.0-4.0**	7	10.7	1	4.1	8	9.0
	<u>Total</u>	<u>65</u>	<u>73.0</u>	<u>24</u>	<u>27.0</u>	<u>89</u>	<u>100.0</u>

\*Combined for  $\chi^2$  Analysis    \*\*Combined for  $\chi^2$  Analysis



to student transfer success. The two groups were found to exhibit no statistically significant differences based on their distributions by sex, marital status, number of years between high school and college, high school size, year of college attendance, reasons for enrolling in a combined program, student ratings of college counseling, alternative schooling choices, high school academic performances and the number of matriculation courses failed.

Transfer success was discovered to be statistically related to college academic performance and student transfer certainty. The transfer group did better academically in college and had higher expectations for transfer than did the non-transfer group. It is interesting to note that although the two groups did not differ statistically, the non-transfer group did better percentage-wise than the transfer group with respect to their high school performance.

On comparing among college differences, no statistically significant relationships were found to exist among the colleges based on the distributions of the students according to their transfer success, their ratings of college counselling and the kind of schooling they would now select to complete their high school matriculation.

Chapter 6 deals with the transfer problems encountered by the group of students who entered university following college and with their subsequent academic success in university.



## Chapter 6

### PROBLEMS EXPERIENCED BY TRANSFER STUDENTS AND ACADEMIC SUCCESS

This chapter presents an analysis of the success achieved by transfer students in university following college and analyzes the problems encountered by these students during the transfer process. The distributions of the students based on the problems encountered, and their university academic results are tested for significance to determine whether or not among college differences exist. The data for the analysis of transfer problems were obtained from the students' responses to the twelve item scale of the questionnaire (see Appendix A).

#### Academic Success

The percentage distribution of transfer students by each year of university attendance and university academic results are presented in this section.

University year one. It was reported in Chapter 5 that 65 of 89 combined program students comprised the university transfer group. Table 18 illustrates that not all of the 65 transfer students were successful transfers as defined by this study. Five of the students who attended a university were discovered to have repeated their college year as freshmen at university. The five were considered in the population because, even though they did not transfer successfully, they were





Table 18

Frequency and Percentage Distribution of Combined Program Students'  
University Results by College Grade Point Averages  
(not more than two significant figures  
should be read in the percentages)

University year	Success achieved	College Grade Point Averages				Totals	
		Less than 2.0	2.0-2.9	3.0-4.0		f.	%
		f.	f.	f.			
I	Failed	3	0	0	0	3	0.0
	Passed	2*	0	0	0	2	0.0
	Withdrew	0	0	0	0	0	0.0
	Total	5	0	0	0	5	100.0
II	Failed	4	7	1	1	12	20.0
	Passed	10	25	7	7	42	70.0
	Withdrew	2	4	0	0	6	10.0
	Total	16	36	8	8	60	100.0
III	Failed	0	2	1	1	3	14.3
	Passed	4	10	4	4	18	85.7
	Withdrew	0	0	0	0	0	0.0
	Total	4	12	5	5	21	100.0
IV	Failed	0	0	0	0	0	0.0
	Passed	1	4	0	0	5	100.0
	Withdrew	0	0	0	0	0	0.0
	Total	1	4	0	0	5	100.0

\*One student who repeated his college year as a university freshman entered the second year successfully but was not included in the second year frequencies.



'salvaged' for university level studies. Each of these five students left the colleges with grade point averages below 2.0 and only one of the five completed his freshman year and entered the sophomore year at a university. No data were available for this one student's academic results in his sophomore year at the time of this study.

University year two. Sixty combined program students from the four Alberta colleges involved in this study were able to transfer directly into the sophomore year of a university. This group of students which were able to transfer successfully without having to repeat their college year at a university, constituted 67.4 percent of the overall population of 89 combined program students.

Of the students who transferred to the second year of a university, 20 percent failed their year, 10 percent withdrew before writing final exams and the remaining 70 percent (42 students) completed the second year either with passing averages or as conditional students. 46.2 percent of the total population of combined program students were successful in transferring to and completing the second year of university.

University years three and four. Table 18 indicates that at the time of the study 21 students had completed the third year at university, 18 successfully and that five of these had completed with success a fourth year.



Table 19 reports the frequency distributions of the transfer students' grade point averages in their sophomore year by their college of origin. The sophomore year was selected for study as it offered larger frequencies than the other university years. The Chi Square value calculated from the table was 7.20. A relationship would exist between the college of origin and the university grade point averages if the observed Chi Square value exceeded the expected value of 7.82 for 3 degrees of freedom at the .05 level. It was concluded from the data that no such relationship exists as there were no significant differences among the colleges based on student university academic performances.

Table 19

Frequency Distribution of Student University Sophomore  
Year Grade Point Averages by College of Origin  
(not more than two significant figures  
should be read in the percentages)

College	University Grade Point Averages(Sophomore Year)				Totals
	Withdrawals*	0-2.0*	2.0-3.0**	3.0-4.0**	
G.P.	0	1	12	0	13
M.H.	4	8	10	1	23
C.L.	2	4	8	2	16
R.D.	1	3	4	1	9
Totals	7	16	34	4	61

\*Combined for  $(\chi)^2$  Analysis    \*\*Combined for  $(\chi)^2$  Analysis

Mean grade point averages. The means were calculated



for the grade point averages of the combined program transfer students for each year of university. The means were 1.8 for the freshman year, 2.2 for the sophomore year, 2.3 for the third year and 2.7 for the fourth year. Figure 8 illustrates the comparison between the combined program transfer students' mean grade point averages for the second and third university years with those mean grade point averages calculated by Falkenberg (1970: 212) for general transfer students and native students for the two years of university. In both years, the combined program transfer students appear to do less well in university than do general transfer and native students.

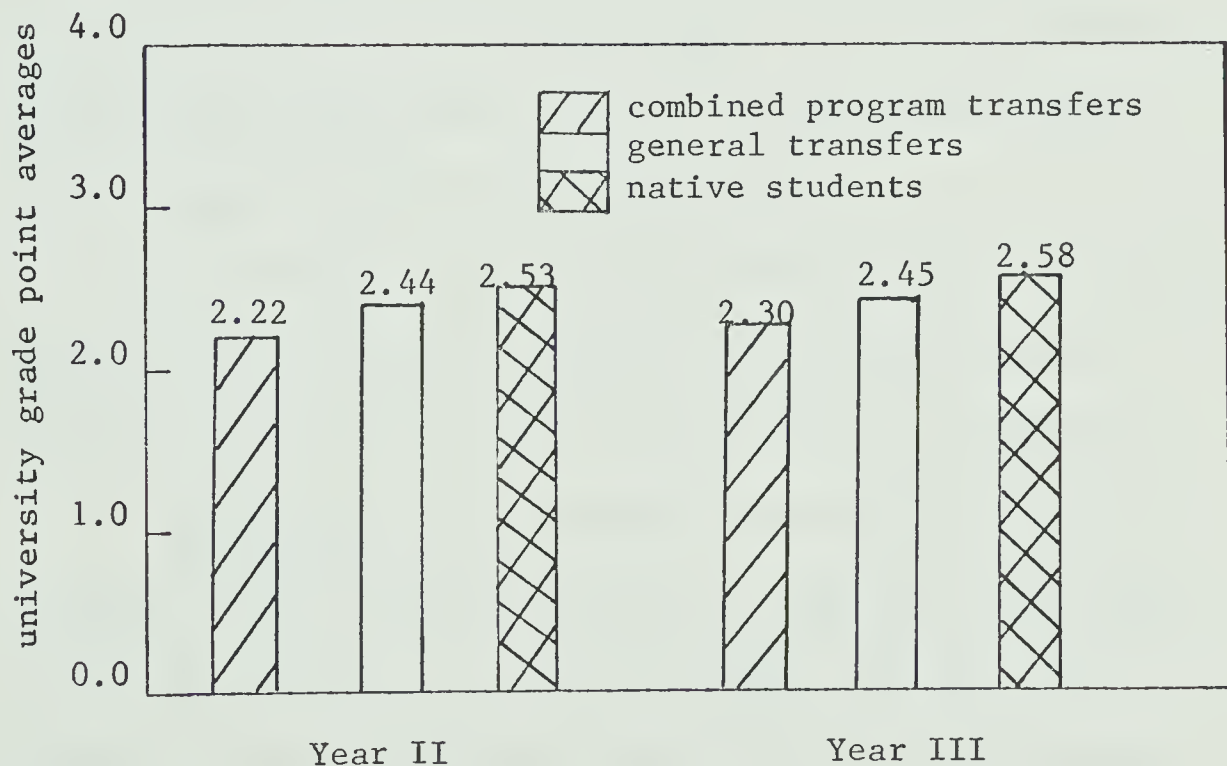


Figure 8

A Comparison of Grade Point Averages Achieved  
At University by Combined Program Transfers,  
General Transfers and Native Students





The mean grade point averages for the combined program students, the general transfer students and the native students of the sophomore year of university were 2.22, 2.44 and 2.53 respectively. For the third year of university the means were 2.30, 2.45 and 2.58 respectively. No raw data were available from the Falkenberg study so that a statistical comparison of the means could not be accomplished.

#### Transfer Problems Experienced

Question eleven of the questionnaire (Appendix A) listed twelve possible problems that were thought to be encountered by students upon transferring from a college to a university (Falkenberg, 1970). Space was provided for the students to add additional problems which they may have encountered and which were not listed. All of the problems added by the students were found to be adequately covered by the original twelve of the questionnaire.

The transfer problems are explored in this section in terms of the seriousness of each problem's effect on the students transferability from the college to a university.

Problem one. Approximately 11 percent of the 65 transfer students reported 'failure to complete their basic study requirements' as a serious transfer problem, 23.0 percent as a minor problem and 66.3 percent as no problem.

Problem two. Of the transfer group, 12.2 percent reported 'failure to complete prerequisites for upper level work' as a serious transfer problem, 15.3 percent as a



minor problem and 72.6 percent as no problem.

Problem three. 'Loss of credits earned in the college upon transferring to a university' was indicated by 18.7 percent of the transfer group as a serious problem, by 13.8 percent as a minor problem and by 67.5 percent as no problem.

Problem four. 'Repetition of course content taken at the college' presented a serious problem to their transferability for 10.7 percent of the transfer students, a minor problem to 13.8 percent and no problem to 75.5 percent.

Problem five. Approximately 16 percent of the transfer group indicated 'development of adequate skills at the college in preparation for university level work' as having presented them with a serious problem to their transferability, 29.2 percent as a minor problem and 54.7 percent as no problem.

Problem six. 'The difference between the university and college grading systems' was reported to be a serious transfer problem by 7.7 percent of the transfer students, a minor problem by 41.5 percent and no problem by 50.8 percent.

Problem seven. 'Failure of the college to provide the necessary matriculation upgrading' presented no problems to 74.0 percent of the transfer students, minor problems to 13.8 percent and serious problems to 12.2 percent.

Problem eight. 'Increased competition from other students in university following transfer' was experienced



Table 20

Frequency and Percentage Distribution of Transfer Problem  
Difficulty Experienced by Successful Transfer

Students by College and Totals  
(not more than two significant figures  
should be read in the percentages)

Problem	College	Problem Difficulty							
		Serious		Minor		None		Totals	
		f.	%	f.	%	f.	%	f.	%
1. Failure to complete basic study requirements before transfer									
	G.P.	3	18.7	4	25.0	9	56.3	16	24.5
	M.H.	3	13.0	5	21.7	15	65.3	23	35.3
	C.L.	0	0.0	5	29.4	12	70.6	17	26.4
	R.D.	1	11.1	1	11.1	7	77.8	9	13.8
	Total	7	10.7	15	23.0	43	66.3	65	100.0
2. Failure to complete prerequisites for upper level work									
	G.P.	4	25.0	1	6.3	11	68.7	16	24.5
	M.H.	3	13.0	3	13.0	17	74.0	23	35.3
	C.L.	1	5.9	4	23.6	12	70.5	17	26.4
	R.D.	0	0.0	2	22.2	7	77.8	9	13.8
	Total	8	12.2	10	15.3	47	72.6	65	100.0
3. Loss of credits earned in college upon transfer									
	G.P.	4	25.0	2	12.6	10	62.4	16	24.5
	M.H.	7	30.5	4	17.6	12	51.9	23	35.3
	C.L.	1	5.9	2	11.8	14	82.5	17	26.4
	R.D.	0	0.0	1	11.1	8	88.9	9	13.8
	Total	12	18.7	9	13.8	44	67.5	65	100.0
4. Repetition of course content taken at the college									
	G.P.	1	6.3	3	18.7	12	75.0	16	24.5
	M.H.	3	13.0	6	26.0	14	61.0	23	35.3
	C.L.	1	5.9	0	0.0	16	94.1	17	26.4
	R.D.	2	22.2	0	0.0	7	77.8	9	13.8
	Total	7	10.7	9	13.8	49	75.5	65	100.0
5. Development of adequate skills at the college in preparation for university level work									
	G.P.	2	12.6	2	12.6	12	74.8	16	24.5
	M.H.	1	4.3	8	34.7	14	61.0	23	35.3
	C.L.	1	5.9	4	23.6	12	70.5	17	26.4
	R.D.	0	0.0	5	55.5	4	44.5	9	13.8
	Total	4	16.1	19	29.2	42	54.7	65	100.0



Table 20 (continued)

Problem	College	Problem Difficulty							
		Serious		Minor		None		Totals	
		f.	%	f.	%	f.	%	f.	%
6. Difference between the university and college grading of students									
G.P.		1	6.3	4	25.0	11	68.7	16	24.5
M.H.		1	4.3	12	51.9	10	43.8	23	35.3
C.L.		1	5.9	6	35.3	10	58.8	17	26.4
R.D.		2	22.2	5	55.5	2	22.3	9	13.8
Total		5	7.7	27	41.5	33	50.8	65	100.0
7. Failure of the college to provide the necessary matriculation upgrading									
G.P.		5	31.3	1	6.3	10	62.4	16	24.5
M.H.		2	8.6	4	17.4	17	74.0	23	35.3
C.L.		1	5.9	3	17.7	13	76.4	17	26.4
R.D.		0	0.0	1	11.1	8	88.9	9	13.8
Total		8	12.2	9	13.8	47	74.0	65	100.0
8. Increased competition from other students									
G.P.		2	12.6	4	23.3	10	62.4	16	24.5
M.H.		6	26.0	5	21.7	12	51.9	23	35.3
C.L.		0	0.0	6	35.8	11	64.2	17	26.4
R.D.		2	22.2	2	22.2	5	55.5	9	13.8
Total		10	15.3	17	26.2	38	58.5	65	100.0
9. Understanding and adjusting to university rules									
G.P.		3	18.7	2	12.6	11	68.7	16	24.5
M.H.		4	17.4	4	17.4	15	65.2	23	35.3
C.L.		0	0.0	2	11.8	15	89.2	17	26.4
R.D.		1	11.1	1	11.1	7	77.8	9	13.8
Total		8	15.3	9	13.8	48	73.0	65	100.0
10. Difficulty in scheduling the required courses in university									
G.P.		3	18.7	2	12.6	11	68.7	16	24.5
M.H.		3	13.0	9	39.0	11	47.8	23	35.3
C.L.		3	17.7	3	17.7	11	64.6	17	26.4
R.D.		1	11.1	1	11.1	7	77.8	9	13.8
Total		10	15.3	15	23.0	40	61.7	65	100.0





Table 20 (continued)

Problem	College	Problem Difficulty							
		Serious		Minor		None		Totals	
		f.	%	f.	%	f.	%	f.	%
11. The matriculation course(s) taken at the college was(were) not acceptable to the university									
	G.P.	2	12.6	1	6.3	13	81.1	16	24.5
	M.H.	2	8.7	1	4.3	20	89.0	23	35.3
	C.L.	0	0.0	0	0.0	17	100.0	17	26.4
	R.D.	0	0.0	0	0.0	9	100.0	9	13.8
	Total	4	6.2	2	3.1	59	90.7	65	100.0
12. The total college program of studies was not adequate to meet your needs									
	G.P.	4	25.0	5	31.3	7	43.7	16	24.5
	M.H.	1	4.3	6	26.0	16	69.7	23	35.3
	C.L.	1	5.9	3	17.7	13	76.4	17	26.4
	R.D.	0	0.0	1	11.1	8	88.9	9	13.8
	Total	6	9.5	15	23.0	44	67.5	65	100.0

as a serious problem by 15.3 percent of the transfers, as a minor problem by 26.2 percent and as no problem by 58.5 percent.

Problem nine. Table 18 shows that 12.2 percent of the transfer group reported 'understanding and adjusting to university rules' as a serious transfer problem, 13.8 percent reported it as a minor problem and 73.0 percent reported it as no problem to their transferability.

Problem ten. 'Difficulty in scheduling the required courses in university' was indicated by 15.3 percent of the transfer students as a serious problem, by 23.0 percent as a minor problem and by 61.7 percent as no problem to their transferability.

Problem eleven. About 91 percent of the transfer students reported that 'acceptance by the university of their high school ma-



triculation courses' did not cause them any problems. Three percent indicated that it caused them minor problems and about six percent reported that it caused them serious problems.

Problem twelve. 'The inadequacy of the total college program of studies to meet student transfer requirements' presented a serious problem to 9.5 percent of the transfer group. 23 percent indicated this problem as a minor one and 67.5 percent reported that it presented them with no transfer difficulties.

The distributions of the transfer students according to the level of difficulty assigned to the preceding twelve problems are recorded in Table 20.

Table 21 tabulates the Chi Square values calculated to show the differences among the students' colleges of origin based on the students' responses to the twelve transfer problems. No significant differences were observed to exist among the colleges for eleven of the transfer problems. Problem 11 was not tested.

### Summary of Chapter 6

The university academic performance of the transfer group was reported in this chapter, and the problems which this group encountered upon transferring to a university were reviewed.

Analysis of the frequency distributions of the 89 combined program students of this study showed that 65 students or 73 percent entered a university following college. Sixty of these students, or 67.4 percent of the population transferred to the sophomore year of university while 5 students or 5.6 percent were required to begin their university studies as freshmen. Only 42 students, or 46.2



Table 21

Significance of Computed Chi Square ( $\chi^2$ ) Values  
for the Differences Among the Colleges  
Based on Transfer Problems  
(not more than two significant figures  
should be read in the percentages)

Problem Number	Observed ( $\chi^2$ )	Theoretical ( $\chi^2$ )	Prob. Level	Degrees of Freedom	Significant
1*	1.04	7.82	.05	3	No
2	0.90	7.82	.05	3	No
3	6.25	7.82	.05	3	No
4	5.85	7.82	.05	3	No
5	2.76	7.82	.05	3	No
6	7.41	7.82	.05	3	No
7	2.18	7.82	.05	3	No
8	0.78	7.82	.05	3	No
9	2.99	7.82	.05	3	No
10	3.25	7.82	.05	3	No
11	Not possible because of small expected frequencies				
12	6.30	7.82	.05	3	No

\*See Table 20 for the corresponding problems

percent of the college combined program population actually completed the sophomore year at university and entered the third year.

The combined program students registered a mean grade point average of 1.80 in the freshman year of university. This mean increased steadily through the second and third years of university to a top mean of 2.7 in the fourth year. Upon comparison of these means with those calculated by Falkenberg for general transfer and native students, the combined program transfer did less well in university than did the general transfer and native students.

All but three of the transfer problems were reported by between 10 and 20 percent of the students as having presented them with serious transfer difficulties. 'Development of adequate skills



at the college in preparation for university level work', 'difference between the college and university in the grading of students' and 'increased competition from other students in university' were reported by less than 10 percent of the students as having presented them with serious transfer difficulties.

No significant relationship was found to exist between the distribution of the transfer students' university sophomore averages and their college of origin, nor between the distribution of the student responses to transfer problem difficulty and their college of origin.

Chapter 7 reviews the degree of success (as expressed by the students in response to question 13 of the questionnaire) achieved by the unsuccessful transfer students after leaving the college, and the problems encountered by these students upon attempted transfer to a university.





## Chapter 7

### PROBLEMS ENCOUNTERED BY NON-TRANSFERS AND ADVANTAGES GAINED THROUGH COLLEGE

Data obtained from questions twelve and thirteen of the questionnaire are reported in this chapter. The advantages which the non-transfer students indicated were gained from their college education are reviewed and the problems encountered by these students on attempted transfer to a university are presented.

#### Advantages Gained

The advantages which the non-transfer students indicated they had gained from their college education are reported in this section under the five headings: social advantages, personal advantages, employment advantages, intellectual advantages and no advantages. The five categories were selected solely as a means of organizing the responses.

Social advantages. Of the twenty-four students who failed to transfer to a university following college, 19 responded to question 13 of the questionnaire. Of these 19 students, three reported their college education as having yielded them social advantages.

1. College education to me was social. It was the first time I realized people were beautiful, interesting, had problems such as I.
2. Social and personal -- better equipped to deal with the problems of raising my own children. Better communication



between friends and family.

3. While I was at the college I sang in the choir which gave me a very good chance to meet people and see much of our country while on tour.

Personal advantages. Five of the unsuccessful transfer students reported that their college education provided them with personal advantages.

1. Most of the courses 'round out' a person and the year helped me decide what I wanted for my life's work.
2. Personal advantages.
3. Improved ideas about learning.
4. Satisfied my state of mind.
5. Increased confidence due to higher level of learning.

Employment advantages. The college programs were reported by four of the unsuccessful transfers as providing them with increased job opportunities.

1. The courses I took did help me to get my present job which is higher paid than some.
2. Financial in that I was able to enter nurse's training which will provide a better future for me.
3. It gave me a better job placement in my working career.
4. Helped me in obtaining employment at a home for emotionally disturbed children.

Intellectual advantages. Five students indicated that although they were unable to transfer to a university their college education was not a wasted year of learning.

1. Definitely enlarged my scope of comprehension and enriched my general knowledge.
2. It gave me a good background for my courses at S.A.I.T.
3. I can appreciate some aspects of society now that I would



not have thought important because of some of the things discussed in college.

4. Social advantages because it broadened my insight on modern problems and helped me form ideas about the world.
5. Some insight into social problems and structures.

No advantages. Although most of the students who responded to question 13 of the questionnaire expressed the feeling that their education at college was not a complete loss, two students stressed that no advantages were gained by them. The replies of these two students are as follows.

1. Nil.
2. There were no real advantages. It cost me a great deal of money and earning time for the sad education I received.

#### Reasons for Transfer Failure

Question twelve of the questionnaire (Appendix A) listed eleven possible reasons why students do not transfer to a university following their year of college studies. Space was provided for the students to add additional reasons which they may have encountered and which were not listed in the questionnaire. In every instance where students responded with a reason of their own in the appropriate space, each reason given was found to be adequately expressed by the eleven specified reasons of the questionnaire.

The reasons for transfer failure are explored in this section in terms of the level of importance assigned to each reason by the non-transfer students.

Reason one. 'Failure to complete the basic study requirements before attempted transfer' was indicated by 46.0 percent of the unsuccessful transfer students as a major reason for their



failure to transfer. Twenty-five percent of the non-transfer group expressed the above statement as a minor reason for their failure to transfer and 29.0 percent reported that it played no part in their failure to transfer.

Reason two. Twenty-five percent of the non-transfer students reported 'failure to complete prerequisites for upper level work' as a major reason for their failure to transfer to a university, 16.7 percent as a minor reason and 58.3 percent as no reason.

Reason three. 'Loss of credits earned in college upon attempted transfer' was indicated as playing no part in their failure to transfer to university by 83 percent of the unsuccessful transfers. 12.5 percent indicated 'loss of credits' as a minor reason and 4.2 percent indicated it as a major reason for their failure to transfer.

Reason four. When they were asked to indicate the seriousness of 'failure of the college to provide the necessary matriculation upgrading' in their decision not to transfer to a university after college 100 percent responded that it was of no importance.

Reason five. Approximately four percent of the non-transfer population reported that reason number five, 'the matriculation courses or their equivalents were not acceptable to the university' was of major importance in their decision not to transfer to a university. The remaining 96 percent reported that the above reason was of no importance to their transfer decision.

Reason six. 'The college program of studies was not adequate to meet transfer requirements to the university' was reported by 100





percent of the unsuccessful transfer students as having no importance in their decision not to transfer.

Reason seven. Twenty-nine percent of the non-transfers indicated that 'the chance to enter an adequate career' played a part of major importance in their decision not to transfer to a university following college. 12.5 percent indicated reason seven was of minor importance and 58.5 percent reported that reason number seven was of no importance to their transfer decision.

Reason eight. 'Marital commitments' was expressed by 8.6 percent of the non-transfers as being of major importance in their decision not to transfer to a university, by 4.3 percent as being of minor importance and by 87.1 percent as being of no importance.

Reason nine. For 4.3 percent of the unsuccessful transfer population 'having to help support at home' proved to be of minor importance to their failure to transfer and for 95.7 percent of no importance.

Reason ten. Finances were reported as having played a role in the transfer decisions of some of the non-transfer students. The reason 'could not afford to attend a university' presented a major problem to 4.3 percent of the non-transfer population, a minor problem to 35.3 percent and no problem to 63.4 percent.

Reason eleven. Twenty-five percent of the unsuccessful transfer students reported that the 'wish to work or travel before attending a university' was of major importance in their decision not to transfer. Twenty-five percent reported reason eleven was of minor importance and 50.0 percent indicated it was of no importance to their transfer decision.



Table 22 lists the frequency and percentage distributions of the importance assigned to the eleven reasons for failure to transfer to a university by college and by the total population of unsuccessful transfers.

Chi Square analysis was not employed to determine among college differences based on the frequency distributions of the non-transfer students' responses to the eleven reasons for failure to transfer. The small frequencies of responses in each category prohibited the use of the Chi Square test, and the nature of the data prevented the collapsing of categories to increase expected cell frequencies.

On visual inspection of Table 22, three reasons appeared to exhibit among college differences. 'Failure to complete the basic study requirements before attempted transfer', 'Failure to complete prerequisites for upper level work' and 'The chance to enter an adequate career' showed large enough variations in their frequency distributions to suggest that possible differences exist among the colleges with respect to these factors.

### Summary of Chapter 7

The advantages that each non-transfer student perceived were derived from his college education were reported in this chapter. Percentage distributions of the students' responses indicated the level of importance played by each of the eleven reasons in the students' decisions not to transfer to a university. Three reasons for non-transfer appeared to demonstrate among college differences, but a Chi Square analysis could not be applied to substantiate this conjecture.



Table 22

Frequency and Percentage Distribution of Transfer Reason Importance Indicated by Non-successful Transfer Students by

College and Totals  
(not more than two significant figures  
should be read in the percentages)

Problem	College	Degree of Importance							
		Major		Minor		None		Totals	
		f.	%	f.	%	f.	%	f.	%
1. Failure to complete the basic study requirements before attempted transfer									
G.P.		4	100.0	0	0.0	0	0.0	4	16.7
M.H.		3	30.0	3	30.0	4	40.0	10	41.6
C.L.		2	50.0	1	25.0	1	25.0	4	16.7
R.D.		2	33.3	2	33.3	2	33.3	6	25.0
Total		11	46.0	6	25.0	7	29.0	24	100.0
2. Failure to complete prerequisites for upper level work									
G.P.		2	50.0	0	0.0	2	50.0	4	16.7
M.H.		3	30.0	1	10.0	6	60.0	10	41.6
C.L.		0	0.0	2	50.0	2	50.0	4	16.7
R.D.		1	16.7	1	16.7	4	66.6	6	25.0
Total		6	25.0	4	16.7	14	58.3	24	100.0
3. Loss of credits earned in college upon attempted transfer									
G.P.		0	0.0	0	0.0	4	100.0	4	16.7
M.H.		0	0.0	2	20.0	8	80.0	10	41.6
C.L.		0	0.0	1	25.0	3	75.0	4	16.7
R.D.		1	16.7	0	0.0	5	83.3	6	25.0
Total		1	4.3	3	12.5	20	83.2	24	100.0
4. Failure of the college to provide the necessary matriculation upgrading									
G.P.		0	0.0	0	0.0	4	100.0	4	16.7
M.H.		0	0.0	0	0.0	10	100.0	10	41.6
C.L.		0	0.0	0	0.0	4	100.0	4	16.7
R.D.		0	0.0	0	0.0	6	100.0	6	25.0
Total		0	0.0	0	0.0	24	100.0	24	100.0
5. The matriculation course(s) or its(their) equivalent(s) was (were) not acceptable to the university									
G.P.		0	0.0	0	0.0	4	100.0	4	16.7
M.H.		1	10.0	0	0.0	9	90.0	10	41.6
C.L.		0	0.0	0	0.0	4	100.0	4	16.7
R.D.		0	0.0	0	0.0	6	100.0	6	25.0
Total		1	4.3	0	0.0	23	95.7	24	100.0



Table 22 (continued)

Problem College		Degree of Importance							
		Major		Minor		None		Totals	
		f.	%	f.	%	f.	%	f.	%
6. The college program of studies was not adequate to meet transfer requirements to the university									
G.P.		0	0.0	0	0.0	4	100.0	4	16.7
M.H.		0	0.0	0	0.0	10	100.0	10	41.6
C.L.		0	0.0	0	0.0	4	100.0	4	16.7
R.D.		0	0.0	0	0.0	6	100.0	6	25.0
Total		0	0.0	0	0.0	24	100.0	24	100.0
7. The chance to enter an adequate career									
G.P.		1	25.0	0	0.0	3	75.0	4	16.7
M.H.		2	20.0	1	10.0	7	70.0	10	41.6
C.L.		1	25.0	2	50.0	1	25.0	4	16.7
R.D.		3	50.0	0	0.0	3	50.0	6	25.0
Total		7	29.0	3	12.5	14	58.5	24	100.0
8. Marital commitments									
G.P.		0	0.0	0	0.0	4	100.0	4	16.7
M.H.		2	20.0	0	0.0	8	80.0	10	41.6
C.L.		0	0.0	1	25.0	3	75.0	4	16.7
R.D.		0	0.0	0	0.0	6	100.0	6	25.0
Total		2	8.6	1	4.3	21	87.1	24	100.0
9. Was required to help support at home									
G.P.		0	0.0	0	0.0	4	100.0	4	16.7
M.H.		0	0.0	0	0.0	10	100.0	10	41.6
C.L.		0	0.0	1	25.0	3	75.0	4	16.7
R.D.		0	0.0	0	0.0	6	100.0	6	25.0
Total		0	0.0	1	4.3	23	95.7	24	100.0
10. Could not afford to attend a university									
G.P.		0	0.0	1	25.0	3	75.0	4	16.7
M.H.		1	10.0	2	20.0	7	70.0	10	41.6
C.L.		0	0.0	2	50.0	2	50.0	4	16.7
R.D.		0	0.0	3	50.0	3	50.0	6	25.0
Total		1	4.3	8	33.3	15	62.4	24	100.0





Table 22 (continued)

Problem College		<u>Degree of Importance</u>							
		<u>Major</u>		<u>Minor</u>		<u>None</u>		<u>Totals</u>	
		f.	%	f.	%	f.	%	f.	%
11. Wished to work or travel before attending a university									
G.P.		0	0.0	1	25.0	3	75.0	4	16.7
M.H.		2	20.0	3	30.0	5	50.0	10	41.6
C.L.		0	0.0	1	25.0	3	75.0	4	16.7
R.D.		4	66.6	1	16.7	1	16.7	6	25.0
Total		6	25.0	6	25.0	12	50.0	24	100.0

Nineteen of the 24 non-transfer students reported the most important advantage that their college education had provided them. Of these nineteen students, three perceived they had gained social advantages, five that they had gained personal advantages, four had gained employment advantages and five reported that they had gained intellectual advantages. Two reported that their college education had provided them with no advantages.

Of the eleven reasons for failure to transfer presented to the students, two were indicated by more than forty percent of the students as having played at least a minor role in their transfer decision. 'Failure to complete the basic study requirements before attempted transfer' and 'failure to complete prerequisites for upper level work' were assigned some degree of importance to their failure to transfer by 71.0 percent and by 41.7 percent of the students respectively.

Two reasons, 'failure of the college to provide the necessary matriculation upgrading' and 'the college program of studies was not adequate to meet your transfer requirements' were indicated by none of the students as having any importance in their transfer decisions.



No significant differences were found to exist among the four colleges according to the reasons selected by the non-transfer students for their failure to transfer to a university following college.



## Chapter 8

### SUMMARY AND CONCLUSIONS

#### Summary of the Study

The purpose of this study was to determine the post-college success of Alberta combined program students as a measure of the effectiveness of the combined programs offered at the Alberta colleges.

Chapter 1 introduced the problem to be studied and outlined the conceptual framework. Chapter 2 reviewed the related literature and established that although combined programs were widespread in North American colleges, very little was recorded about the success of such programs at 'salvaging' high school drop-outs. Chapter 3 presented the research methodology and analysis procedures. Chapter 4 established the relationship between the questionnaire return group and the total population.

The analysis of the data was presented in Chapters 5, 6 and 7. Chapter 5 determined the academic and personal profiles of the transfer and non-transfer students. Chapter 6 reviewed the success achieved in university by the transfer students and established the degree to which certain transfer problems affected their transferability. Chapter 7 reviewed the post-college success of the non-transfer students and determined the importance of certain reasons for their failure to transfer.

This chapter summarizes briefly the findings of Chapters 5, 6 and 7, draws appropriate conclusions and makes several suggestions



for further study.

### Summary of Findings

Student transfer success was concluded to be statistically undifferentiated according to sex, marital status, number of years between high school and college, high school size, year of college attendance, reasons for enrolling in a combined program, students' ratings of college counselling and alternative means to complete high school matriculation. It is important to note that nearly 40 percent of the population, 33 percent of the transfer group and 50 percent of the non-transfer group, indicated that given a second chance, they would not now select a college combined program to complete their high school matriculation .

The college performance of the transfer group was significantly better than the non-transfer group, and a significantly greater number of transfer students than non-transfers reported that on first entering college they felt fairly certain they would transfer to a university after their college year.

Seventy-three percent of the combined program student population entered university following college. Five of these students were required to repeat their college year at the university, so that 67.4 percent of the total population actually transferred successfully to the second year of university. Forty-two members of this group or about 46 percent of the overall population successfully completed the second year of university.

The mean grade point averages of the combined program transfers tended to increase from a low of 1.8 in the freshman year of





university to a high of 2.67 in the fourth year. When compared to the mean grade point averages of regular transfer students and native students as reported by Falkenberg (1970: 212), the combined program students did not do as well.

All of the transfer problems presented to the combined program transfers were indicated by less than 20% of the group as having given them serious transfer difficulties. Three of these problems, 'development of adequate skills at the college in preparation for university level work', 'difference between the college and university in the grading of students' and 'increased competition from other students in university' were reported by less than ten percent of the students as having presented them with serious transfer difficulties.

The 27 percent of the population which failed to transfer following college indicated that two reasons were more important in their decision not to transfer to a university than the others of the eleven reasons presented to them in the questionnaire. 'Failure to complete basic study requirements before transfer' and 'failure to complete prerequisites for upper level work' were indicated by more than 40 percent of the unsuccessful transfer students as reasons for their failure to transfer. All of these students in the non-transfer group indicated 'failure of the college to provide the necessary matriculation upgrading' and 'the total college program of studies was inadequate to meet your transfer needs' as unimportant to their failure to transfer.

Of the 19 students from the non-transfer group who reported the advantages gained by them from their college education only two



replied that their college education was a waste of time.

No significant differences were discovered to exist among the colleges with regards to the transfer success of their combined program students, to the level of counselling made available to the students and to the number of students who would not repeat their college experience if they were able to redo their post-secondary education. In addition, no significant differences were found to exist among the colleges with regards to the combined program students' university academic performances and the types of transfer problems and reasons for transfer failure encountered by these students.

### Conclusions

The combined high school matriculation university transfer programs of the Alberta colleges have been designed to 'reclaim' students who have not completed their high school matriculation so that they might go on to university level studies. The colleges have been only partially successful at meeting this objective.

Based on the data provided by the students and their academic performances, 73 percent of the combined program students were found to have reached at least some level of university studies. Of the total population of students in the Alberta colleges combined programs, only 46.2 percent of the 'salvaged' students ever reached the third year of university. No assessment was made in this study of the number of students who would have reached university if they had not followed a combined program.

The students who did transfer to a university following the



combined programs did not do as well academically in university as did regular transfer students from the colleges nor as well as native students, registering lower mean grade point averages than either of these groups.

For those students who did not transfer to a university following college, failure to take advantage of the opportunities offered them by the college program of studies was reported as the major reason for failure to transfer. Based on these student reports the colleges appear to present the combined program students with the necessary educational background for successful transfer to a university should the students make use of the advantages available. Possibly, additional counselling is necessary to help such students to make use of these advantages.

The low grade point averages in the first year following transfer from a combined program and the high failure rate of combined program transfers in university suggest a need for a closer liaison between the colleges and universities of Alberta may be necessary to reduce the 'transfer shock' experienced by those who do manage to transfer to a university.

#### Suggestions for Further Study

During the course of the present study two possibilities for further study became apparent. First, it was discovered that no study has ever been attempted in Alberta to determine the ratio of students who leave high school before completing full matriculation and who manage to go on to university without having to complete a combined program at college. It is believed from evidence uncovered



in this study that a large number of such cases do occur in the province. A study of this group of students would provide useful data for comparison with the combined programs and general transfer programs and could provide the basis for a cost-effectiveness analysis of the combined programs and general transfer programs of the Alberta colleges.

The second problem which came to light was a need for a study of the informal articulation policies which exist among the colleges and universities of Alberta. The college administrators and counselling services know very little about these informal arrangements which occur frequently between the various faculties and schools of the universities and individual transfer students. Although formal articulation policies set the transfer agreements between a college and a university, a large number of students who would be unable to transfer under the regulations of the formal agreements do manage to transfer to universities because of agreements made on an informal level. Given the knowledge of the possible informal acceptance policies of the universities, the colleges could increase the ratio of successful transfers simply by making this knowledge available to the students through the college counselling services.





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A P P E N D I X    A

THE QUESTIONNAIRE



## QUESTIONNAIRE

Where brackets are provided, please check the appropriate response ( ), otherwise, answer each question or statement in the spaces provided.

For Office  
Use Only

1. Your sex is:

- (a) male ( )  
(b) female ( )

1. C<sub>1</sub>  
2.

2. Your present marital status is:

- (a) single ( )  
(b) married ( )  
(c) divorced ( )  
(d) widowed ( )

1. C<sub>2</sub>  
2.  
3.  
4.

3. The enrollment of the high school you last attended was:

- (a) less than 100 ( )  
(b) 101-300 ( )  
(c) 301-500 ( )  
(d) 501-1000 ( )  
(e) over 1000 ( )

1. C<sub>3</sub>  
2.  
3.  
4.  
5.

4. The name of the college which you attended was:

- (a) Grande Prairie ( )  
(b) Medicine Hat ( )  
(c) Camrose Lutheran ( )  
(d) Red Deer ( )

1. C<sub>4</sub>  
2.  
3.  
4.

5. The academic year (years) during which you attended college was (were):

- (a) 1966-1967 ( )  
(b) 1967-1968 ( )  
(c) 1968-1969 ( )  
(d) both a and b ( )  
(e) both a and b ( )  
(f) both b and c ( )

1. C<sub>5</sub>  
2.  
3.  
4.  
5.  
6.



2

For Office  
Use Only

6. How do you rate the counselling which you received at college?

- |                             |     |    |    |
|-----------------------------|-----|----|----|
| (a) excellent               | ( ) | 1. |    |
| (b) good                    | ( ) | 2. |    |
| (c) fair                    | ( ) | 3. | C6 |
| (d) poor                    | ( ) | 4. |    |
| (e) received no counselling | ( ) | 5. |    |

7. When you first enrolled in college, how certain were you about transferring to a university to complete your undergraduate studies?

- |   |     |    |    |
|---|-----|----|----|
| (a) fairly certain I would transfer     | ( ) | 1. |    |
| (b) undecided                           | ( ) | 2. | C7 |
| (c) fairly certain I would not transfer | ( ) | 3. |    |

8. The following statements list the possible alternatives that were open to you when you left high school.

In the light of your experience since then, which alternative would you now select if you were again just leaving high school? (Check one only).

- |  |     |    |    |
|--|-----|----|----|
| (a) take a combined program at a college   | ( ) | 1. |    |
| (b) return to high school to complete your matriculation                         | ( ) | 2. |    |
| (c) complete your high school matriculation at night school                      | ( ) | 3. |    |
| (d) complete your high school matriculation by correspondence courses            | ( ) | 4. | C8 |
| (e) complete your high school matriculation at summer school                     | ( ) | 5. |    |
| (f) complete your high school matriculation with the aid of a tutor              | ( ) | 6. |    |
| (g) discontinue your education and enter the work force                          | ( ) | 7. |    |
| (h) pursue some post-secondary program which does not require full matriculation | ( ) | 8. |    |



For Office  
Use Only

9. Why did you choose to attend college and take a combined program rather than one of the alternatives listed above?

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C<sub>9</sub>

UNIVERSITY TRANSFERS, PLEASE CONTINUE THE QUESTIONNAIRE UP TO AND INCLUDING QUESTION 11 AND STOP THERE. THEN PROCEED TO QUESTIONS 14 AND 15.

NON TRANSFERS, COMPLETE QUESTIONS 12, 13 AND 14 ONLY. OMIT QUESTIONS 10, 11 AND 15.

TRANSFER STUDENTS ONLY

(10 and 11)

10. Check the name of the faculty or school in which you were enrolled at university.

- |   |     |     |  |
|---|-----|-----|--|
| (a) Faculty of Agriculture                          | ( ) | 1.  |  |
| (b) Faculty of Arts                                 | ( ) | 2.  |  |
| (c) Faculty of Business Administration and Commerce | ( ) | 3.  |  |
| (d) School of Dental Hygiene                        | ( ) | 4.  |  |
| (e) Faculty of Dentistry                            | ( ) | 5.  |  |
| (f) Faculty of Education                            | ( ) | 6.  |  |
| (g) Faculty of Engineering                          | ( ) | 7.  |  |
| (h) School of Household Economics                   | ( ) | 8.  |  |
| (i) Faculty of Law                                  | ( ) | 9.  |  |
| (j) School of Library Science                       | ( ) | 10. |  |
| (k) Faculty of Medicine                             | ( ) | 11. |  |
| (l) School of Nursing                               | ( ) | 12. |  |
| (m) Faculty of Pharmacy                             | ( ) | 13. |  |
| (n) Faculty of Physical Education                   | ( ) | 14. |  |
| (o) School of Rehabilitation Medicine               | ( ) | 15. |  |
| (p) Faculty of Science                              | ( ) | 16. |  |

C10  
&  
11





For Office  
Use Only

11. In evaluating your transfer from the college to the university indicate whether you consider the following to have been:

- |   |     |     |     |                     |
|---|-----|-----|-----|---------------------|
| (a) a serious problem,  |     |     |     |                     |
| (b) a minor problem,  |     |     |     |                     |
| (c) no problem.   |     |     |     |                     |
| (i) failure to complete basic study   | ( ) | ( ) | ( ) | 1. C <sub>12</sub>  |
| (ii) failure to complete prerequisites for upper level work.  | ( ) | ( ) | ( ) | 2. C <sub>13</sub>  |
| (iii) loss of credits earned in the college upon transfer.  | ( ) | ( ) | ( ) | 3. C <sub>14</sub>  |
| (iv) repetition of course content taken at the college.   | ( ) | ( ) | ( ) | 4. C <sub>15</sub>  |
| (v) development of adequate skills at the college in preparing for university level work.                     | ( ) | ( ) | ( ) | 5. C <sub>16</sub>  |
| (vi) difference between the college and university in grading of students.                                    | ( ) | ( ) | ( ) | 6. C <sub>17</sub>  |
| (vii) failure of the college to provide the necessary matriculation upgrading.                                | ( ) | ( ) | ( ) | 7. C <sub>18</sub>  |
| (viii) increased competition from other students.   | ( ) | ( ) | ( ) | 8. C <sub>19</sub>  |
| (ix) understanding and adjusting to university rules.   | ( ) | ( ) | ( ) | 9. C <sub>20</sub>  |
| (x) difficulty in scheduling the required courses in university.  | ( ) | ( ) | ( ) | 10. C <sub>21</sub> |
| (xi) the matriculation courses were not acceptable to the university  | ( ) | ( ) | ( ) | 11. C <sub>22</sub> |
| (xii) the total college program of studies which you took at the college was not adequate to meet your needs. | ( ) | ( ) | ( ) | 12. C <sub>23</sub> |
| (xiii) other (please specify) _____   |     |     |     |                     |
| _____   |     |     |     |                     |
| _____   |     |     |     |                     |
| _____   | ( ) | ( ) | ( ) | 13. C <sub>24</sub> |



5

## NON TRANSFERS ONLY

(12 and 13)

For Office  
Use Only

12. The statements listed below express some of the reasons why a student such as yourself does not transfer to a university following college. Please place a check mark in the appropriate bracket to the right of each statement to indicate the level of importance that statement had in your decision not to transfer.

Should you feel that there is an additional reason not stated below, space has been provided for you to express that reason as statement number xii.

Again, please check one of the brackets to the right, to express the importance of that statement in your decision not to transfer to a university following college.

- |   |     | of major importance | of minor importance | of no importance |     |  |
|---|-----|---------------------|---------------------|------------------|-----|--|
| (i) failure to complete the basic study requirements before attempted transfer.                       | ( ) | ( )                 | ( )                 | 1.               | C25 |  |
| (ii) failure to complete the prerequisites for upper level work.                                      | ( ) | ( )                 | ( )                 | 2.               | C26 |  |
| (iii) loss of credit earned in the college upon attempted transfer.                                   | ( ) | ( )                 | ( )                 | 3.               | C27 |  |
| (iv) failure of the college to provide adequate matriculation upgrading.                              | ( ) | ( )                 | ( )                 | 4.               | C28 |  |
| (v) the matriculation courses you took at the college were not acceptable to the university.          | ( ) | ( )                 | ( )                 | 5.               | C29 |  |
| (vi) the college program of studies was not adequate to meet transfer requirements to the university. | ( ) | ( )                 | ( )                 | 6.               | C30 |  |
| (vii) the chance to enter an adequate career.   | ( ) | ( )                 | ( )                 | 7.               | C31 |  |
| (viii) marital commitments.   | ( ) | ( )                 | ( )                 | 8.               | C32 |  |
| (ix) was required to help support at home.  | ( ) | ( )                 | ( )                 | 9.               | C33 |  |



6

	of major importance ( ) ( ) ( )	of minor importance ( ) ( ) ( )	of no importance ( ) ( ) ( )	For Office Use Only
(x) could not afford to attend a university.	( )	( )	( )	10. C34
(xi) wished to travel or work before attending a university.	( )	( )	( )	11. C35
(xii) other (please specify)				
_____				
_____				
_____	( )	( )	( )	12. C36
_____				
13. If you feel that your college education provided you with some financial, social or person advantages -- that would not have been possible without such an education -- please explain what you believe those advantages to be.				
_____				
_____				
_____				
_____				
_____				
				C37
14. Please list the high school matriculation course (courses) or its college equivalent(s) which you took while in college attendance and indicate the mark received on it (each).				
_____	_____			
_____	_____			
_____	_____			
_____	_____			
15. If you transferred to a university following college the name of that university was:				
_____				



A P P E N D I X    B

CORRESPONDENCE







Dear

This letter is being written with the hope of enlisting your cooperation in connection with a Master's research project being conducted at the University of Alberta's Department of Educational Administration under the supervision of Dr. G. L. Fisher.

The purpose of the research is to study the post-college success of students who have been enrolled in combined high school matriculation-university transfer programs at an Alberta college.

Your responses to the questionnaire will provide information which will be of use to the colleges for the evaluation of their college programs and for the evaluation of the opportunities for advancement which they are thought to provide for their students.

As you are one of fifty-one former Camrose Lutheran College students involved in this study, your cooperation in completing and returning the enclosed questionnaire will be an important contribution to the study and will be greatly appreciated. A self-addressed envelope is enclosed for the return of the completed questionnaire. Your questionnaire has been assigned a code number so that your responses to it will remain anonymous and confidential.

Yours truly,

John Eaton.





Dear

Several weeks ago you were mailed a questionnaire. Possibly it failed to reach you. Enclosed you will find another questionnaire.

This project is being conducted in connection with a Master's research thesis at the University of Alberta's Department of Educational Administration under the supervision of Dr. G. Fisher. The purpose is to study the post-college success of students who have been enrolled in combined programs-- programs which permit students to complete high school matriculation deficiencies while pursuing university level courses -- at an Alberta college.

Combined programs have been in existence in the Alberta colleges for only a few years and to date little is known about their effectiveness. This study is an attempt to determine the effectiveness of these programs at meeting the needs of the students who have participated in them.

As you are one of the first students to take a combined program in an Alberta college your participation in this study will represent an important source of data. Your cooperation in completing and returning the enclosed questionnaire will be sincerely appreciated.

A self-addressed envelope is enclosed for your reply. A number has been assigned to your questionnaire to ensure that your responses will remain anonymous and confidential.

Yours sincerely,

John Eaton.









**B29990**